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CONSOLIDATED TRANSLATION SURVEY

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CONSOLIDATED TRANSLATION SURVEY

FOR DECEMBER 1965

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CONSOLIDATED TRANSLATION SURVEY

PREFACE

This survey is prepared monthly by the Foreign Documents Division, Office of Central Reference, CIA, from lists received through the cooperation of US government agencies and includes translations prepared by such agencies, private industry, universities, research institutions, and commercial translation organizations. It is a compilation of foreign documentary projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (*), and, when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

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American Geophysical Union
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AI

Advance Information
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111 Fourth Avenue
New York, N.Y. 10003

AIP

American Institute of Physics
335 East 45th Street
New York, New York 10017

ANL - Argonne National Laboratory, Illinois
(see AEC)

APL - Applied Physics Laboratory (see Navy)

BISI

British Iron and Steel Industry Translation Service
The Iron and Steel Institute
4 Grosvenor Gardens
London, S.W. 1, England

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CFSTI

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DIA

Defense Intelligence Agency
Washington, D.C. 20301

FTD - Foreign Technology Division (see AF)

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Prof. E. Wm. Heinrich
Mineralogical Laboratory
University of Michigan
Ann Arbor, Michigan

GSA

Geological Society of America
Publishing Department
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IEEE

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Office of Naval Intelligence
Washington 25, D.C.

NRL - Naval Research Laboratories (see Navy)

ONI - Office of Naval Intelligence (see Navy)

ORNL - Oak Ridge National Laboratory (see AEC)

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Society for Industrial and Applied Mathematics
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UCRL

University of California
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Livermore, California
(see AEC)

USRL

Office of Naval Research
U.S. Navy Underwater Sound Reference Laboratory
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Orlando, Florida 32806

USSR

Economic

The Development of the Productive Forces in the Economic Regions of the USSR, (The Problem of Developing Small Cities and Restricting the Growth of Large Cities), by V. Sh. Dzhaoshvili, 9 pp.
RUSSIAN, per, Academy of Sciences of the USSR, Geographic Series, No 2, 1964,
ACSI 1-8462-A
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Scientific Labor Organization Signalization and Communication Systems, by V. D. Buts, 6 pp.
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A Self-Aligning System of Programmed Control of Machine Tools, by A. E. Kobrinskiy, A. Sh. Koliskor, Ye. I. Levkovskiy, V. Ye. Popov, and V. Ye. Sergeyev, 8 pp.
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Methodological Problems of the Transfer of Sovkhozes to Full Self-Support, by A. Yemel'yanov and I. Marinko, 19 pp.
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Strengthening Economic Incentives in Trade,
by Ya. Orlov, 12 pp.
RUSSIAN, per, Voprosy ekonomiki, No 9, Sept
1965, pp. 89-97.
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Vital Problems of Material Stimulation,
by G. Anisimov & F. Veselkov, 11 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 9,
Sep 1965, pp 147-151
JPRS 32924

Reports at Conference on Improving Systematic
Organization and Management of Socialist
Production, by A. Pevzner, 10 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 9,
Sept 1965, pp. 151-156.
JPRS 33144

Lag in Production by the Baku Electrical
Machinery Plant, by A. Dzhabrailov, A.
Grigoryan, et al., 8 pp
RUSSIAN, np, Vyshka, 25 Aug 65, p 1
JPRS 32892

The Baku Tire Plant Will Improve Operations
in the Light of the Decisions by the September
Plenum, by F. Aliyev, 7 pp.
RUSSIAN, np, Vyshka, 5 Oct 1965, p. 2.
JPRS 33141

State of Nakhichevan' Industry Discussed,
by N. Sosonkin, 9 pp.
RUSSIAN, np, Vyshka, 6 and 8 Oct 1965, p. 2.
JPRS 32820

Statute on the Socialist State Industrial
Enterprise, 8 pp.
RUSSIAN, np, Vyshka, 24 Oct 1965, p 2
JPRS 33316

General Economic Figures and Explanation
of Depreciation, by I. Pavlov, 5 pp.
RUSSIAN, np, Vyshka, 27 Oct 1965, p 3
JPRS 33316

Sungait Petro-Chemical Plant Lagging With
Deliveries to Builders, 5 pp.
RUSSIAN, np, Vyshka, 2 Nov 1965, p 2
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USSR
Economic (Contd)

The Present Situation in the Mechanization
of Managerial and Engineering Labor and the
Outlook for the Near Future, by S. Sazanov,
12 pp.
RUSSIAN, per, Vestnik Statistiki, No 8,
Aug 1965, pp. 3-11.
JPRS 33034

The Level of World Standards Must Be Reached,
by G. Zedginidze, 5 pp.
RUSSIAN, np, Zarya Vostoka, 15 Sept 1965,
p. 3.
JPRS 32820

Railway Transportation in the USSR during
the First Six Months of 1965, 8 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport,
No 9, Sept 1965, pp. 16-19.
JPRS 33139

Automation and the Scientific Societies, by
Bela Zentai, 12 pp.
HUNGARIAN, per, Mersek az Automatika
JPRS 32679

Political

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Party, 12 pp.
RUSSIAN, per, Kommunist, No 15, Oct 1965,
pp 3-10
JPRS 32923

Kommunist Discusses Significance of Seventh
Komintern Congress, by A. Rumyantsev, 25 pp.
RUSSIAN, per, Kommunist, No 15, Oct 1965,
pp. 18-33.
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Independence, Initiative, Responsibility,
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RUSSIAN, per, Kommunist, No 15, Oct 1965,
pp 49-57
JPRS 32923

The Individual Approach in Atheistic Work,
by A. Yudin, 11 pp.
RUSSIAN, per, Kommunist, No 15, Oct 1965,
pp 58-64
JPRS 32923

USSR
Political (Contd)

V. I. Lenin on "Leftism" in the Communist Movement, by B. Taam, 8 pp.
RUSSIAN, np, Kommunist Estonii, No 9, Sep 1965, pp 78-83.
JPRS 32899

Kommunist Estonii: Liberation Struggle of Latin American Peoples, 9 pp.
RUSSIAN, per, Kommunist Estonii, No 9, Sept 1965, pp. 84-91.
JPRS 32878

The Growing Role of the CPSU in the Development of Soviet Society, by Col. A. Babadov, 14 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, No 19, Oct 1965, pp. 9-13.
JPRS 33185

Reaction to the September Plenum of the CC CPSU, 5 pp.
RUSSIAN, np, Komsomol'skaya Znamya, 2 Oct 1965, p. 1.
JPRS 33016

Soviet Monthly Reviews Twenty Years of United Nations Existence, by G. Morozov, 15 pp.
RUSSIAN, per, Mirovaya ikonomika i mezhdunarodnyye otnosheniya, No 10, 1965, pp. 18-27.
JPRS 33026

Study Plans and Teaching Aids for the CPSU Study Year, 8 pp.
RUSSIAN, per, Partiynaya zhizn', No 16, Aug 1965, pp 48-52.
JPRS 32899

Pravda Analyzes Role of Worldwide Federation of Democratic Youth, 5 pp.
RUSSIAN, np, Pravda, 10 Nov 1965, p. 4.
JPRS 33136

In Anticipation of the 23rd Congress of the Leninist Party, 6 pp.
RUSSIAN, np, Pravda, 11 Nov 1965, p. 1.
JPRS 32887

USSR
Political (Contd)

Stand by Sixth Congress of Portuguese CP against the Fascist Regime, by Alvaro Cunhal, 6 pp.
RUSSIAN, np, Pravda, 11 Nov 1965, p. 3.
JPRS 33136

The International Duty of Communists of All Countries, 8 pp.
RUSSIAN, np, Pravda, 28 Nov 1965, p. 1.
JPRS 33145

The Communist View - On the Dialogue Between Spanish Catholics and Communists, 22 pp.
SPANISH, per, Espana Republicana, Vol XXVII, No 599, 15 Oct 65, pp 9-31.
JPRS 32899

An Appeal on the Rights of Ukrainian Minorities in Communist Areas Outside the Ukrainian SSR, by Roman Rakhmanniy, 13 pp.
UKRAINIAN, Per, Suchoanist', No 10, Oct 1965, pp 93-105
JPRS 33292

Military

The Revolution in Military Affairs and the Spiritual Strength of Troops, by Col. A. Milovidov, 11 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, No 13, Jul 1965, pp. 8-17.
JPRS 33093

The Essence of a World Nuclear-Rocket War, by Lt. Col. Ye. Rybkin, 11 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, No 17, Sept 1965, pp. 50-56.
JPRS 33103

Preparing the Youth for Service in the Soviet Armed Forces, by A. Getman, 6 pp.
RUSSIAN, np, Sovetskiy Patriot, 26 Sept 1965, p. 2.
JPRS 32949

The Subject of Economic Progress in the USSR Discovered in DOBAAF Courses, by A. Putintsev, 7 pp.
RUSSIAN, np, Sovetskiy Patriot, 6 Oct 1965, pp. 2-3.
JPRS 32949

USSR
Military (Contd)

Exhibit of Equipment Built by Soviet
Radio Amateurs, by L. Bykovskikh and E.
Loginov, 5 pp.
RUSSIAN, np, Sovetskiy Patriot, 13 Oct
1965, p. 3.
JPRS 32949

Several Aspects of the Leadership of the Armed
Struggle in the Summer of 1942, by A. Vasilev-
skiy, 12 pp.
RUSSIAN, per, Voyenno Istoricheskiy Zhurnal,
No 8, Aug 1965, pp. 3-10.
JPRS 33163

Preparing Youth for the Armed Forces, by M.
Stegantsev, 6 pp.
RUSSIAN, per, Voyennyye Znaniya, No 10, 1965,
pp. 1-2.
JPRS 32879

Emergency Structural Repairs in Blast Zone,
by Engr Lt. Col. K. Boroday and Lt. Col. V.
Golubev, 5 pp.
RUSSIAN, per, Voyennyye Znaniya, No 10, 1965,
pp. 20-21.
JPRS 32879

For Contusions and Fractures, by O. Markova,
5 pp.
RUSSIAN, per, Voyennyye Znaniya, No 10, 1965,
pp. 24-25.
JPRS 32879

Defense against Weapons of Mass Destruction
in the Rural Area, by N. P. Olovyanishnikov,
42 pp.
RUSSIAN, pamphlet, Zashchita ot Oruzhiya
Massovogo Porazheniya v Sel'skoy Mestnosti,
1963, pp. 3-48.
JPRS 32877

Means of Protection Against Nuclear, Chemical
and Bacteriological Weapons, by ~~Samoylov~~.
RUSSIAN, bk, Sposoby Zashchity ot Yadernogo
Khimi i Bakteriolo Oruzhiya, Moscow, 1963.
Dept of Navy Tr 4319/ONI 1032

USSR
Military (Contd)

Torpedomen, by O. Boronov, 5 pp.
RUSSIAN, per, Voyennyye Znaniya,
No 3, Mar 1965, pp 12-13.
DIA LN 47-65

Soviet Astronaut Training, by
G. Maack.
GERMAN, per, Berliner Zeitung, 1965,
p 3.
*FTD-TT-65-1885

Geographic

Towns of the Saratovskaya Oblast,
by P. A. Kavunov, 44 pp.
RUSSIAN, rpt, Goroda Saratovskoy Oblasti.
ACSI I-6571
ID 2204004665

Methods of Compiling World Agricultural Charts,
8 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Geograficheskaya
No 2, 1964.
ACSI I-8462-C
ID 2204049765

Coordination of Scientific Research,
An All-Union Conference on the Problems
Inherent in the Study and Exploitation
of the Tayga, by B. N. Likhanov. 8 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Geograficheskaya
No 2, 1964,
ACSI I-8462-D
ID 2204049765

Scientific Geographic Conferences in Havana;
Tallin Meeting of Geographers and Economists;
Third All-Union Session on Land Zoogeography,
by B. N. Semevskiy, M. Rostovtsev, et al, 5 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Geograficheskaya
No 2, 1964.
ACSI I-8462-G
ID 2204049765

The Wandering of Rivers and Lakes in Central
Asia, by N. T. Kuznetsov, 84 pp.
RUSSIAN, pamphlet, Po sledam bluzhdayushchikh
rek, No 8, 1965, 80 pp.
JPRS 33184

USSR
Sociological

Regulations on Salaries of Managers and Specialists in S. vkhoses and Other State Agricultural Enterprises, 7 pp.
RUSSIAN, per, Bulletin', No 7, 1965, pp 3-8.
JPRS 32671

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RUSSIAN, per, Ekonomicheskaya Gazeta, No 33, 18 Aug 1965, p 10.
JPRS 32671

Intensification of Vocational-Technical Training in the USSR, by A. Bulgakov, 8 pp.
RUSSIAN, np, Ekonomicheskaya Gazeta, No 35, 1 Sep 1965, p 2,
JPRS 32671

A Report on the Soviet Vocational-Technical Educational System, by V. Belkin, 8 pp.
RUSSIAN, np, Ekonomicheskaya gazeta, No 39, 29 Sept 1965, pp. 10-11.
JPRS 33187

The Problem of the Survival Rate of New Settlers and the Methods for Studying It, by Zh. A. Zayonchkovskaya and V. I. Perevedentsev, 8 pp.
RUSSIAN, per, Izvestiya Sibirskogo otdeleniya Akademii nauk SSSR, seriya obshchestvennykh nauk, Vol 5, No 2, 1965, pp. 71-77.
JPRS 33187

Convention in Realistic Art, by A. Mikhaylova, 19 pp.
RUSSIAN, per, Kommunist, No 15, Oct 1965, pp 74-85
JPRS 32923

Genetics: Achievements and Future, by N. Dubinin, 11 pp.
RUSSIAN, per, Kommunist, No 15, Oct 1965, pp 86-93
JPRS 32923

Certain Problems of Ideology and Religion, by M. Morozov, 8 pp.
RUSSIAN, per, Nauka i Religiya, No 10, Oct 1965, pp 9-13
JPRS 33059

USSR
Sociological (Contd)

Islam and Modern Times, by L. Klimovich, 8 pp.
RUSSIAN, per, Nauka i Religiya, No 10, Oct 1965, pp 15-20
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Islam Abroad, by M. Andreyev, 7 pp.
RUSSIAN, per, Nauka i Religiya, No 10, Oct 1965, pp 29-31
JPRS 33059

The Master Workman: His Functions, Training Problems and Use in Production, by I. Kusnetsov, 14 pp.
RUSSIAN, per, Sotsialisticheskiy Trud, Aug 1965, pp 48-57.
JPRS 32671

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RUSSIAN, per, Sotsialisticheskiy Trud, No 8, Aug 1965, pp 129-136.
JPRS 32671

Production Specialization and Raising the Effectiveness of Labor, by A. Dobra, 10 pp.
RUSSIAN, per, Sotsialisticheskiy trud, No 9, Sept 1965, pp. 8-15.
JPRS 33187

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RUSSIAN, per, Sotsialisticheskiy trud, No 9, Sept 1965, pp. 139-142.
JPRS 32995

Training of Skilled Workers Must Be Intensified, by A. A. Bulgakov, 6 pp.
RUSSIAN, np, Trud, 10 Sept 1965, p 2,
JPRS 32671

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The Work of the Trade Unions in Educating the Working Class, by Sotir Kamleri, 19 pp.
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JPRS 32983

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JPRS 33095

Plenum of Central Council of Trade Unions Discusses Obstacles to Plan Fulfillment, by Stefi Kotmilo, 6 pp.
ALBANIAN, np, Zeri i Popullit, 3 Nov 1965, p. 2.
JPRS 33165

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ALBANIAN, np, Zeri i Popullit, 11 Nov 1965, p. 2.
JPRS 33095

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JPRS 33078

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JPRS 33137

The Kremikovtsi Metallurgical Combine is Assured of Raw Materials, by Engineer Georgi Nikolov Kotev, 8 pp.
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BULGARIAN, per, Stroitelstvo, No 7, Jul 1965, pp 25-28.
JPRS 32775

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CROATIAN, per, Ekonomski Pregled, No 7-8, Jul-Aug 1965, pp. 503-519.
JPRS 33111

Varieties of Grain in Czechoslovakia, by Miloslav Vluch and Antonin Foral, 6 pp.
CZECH, per, Mezinarodni zemedelsky casopis, No 3, Aug 1965, pp. 39-42.
JPRS 33137

The Organization of Private Boatmen in Germany, by E. L. Banzhaf, 23 pp.
FRENCH, per, Revue de la Navigation Interieure et Rhenane, No 16, 25 Sept, 1961, pp 695-702.
DIA LN 109-65

Boelkow Report by Bolkow GmbH, 140 pp.
GERMAN, rpt, Atch to IR 1-834-0192-65
1965, Munich, Germany.
DIA LN 132-65

Main Tasks for the Further Development of the Concrete Industry, by G. Elawicht, 6 pp.
GERMAN, per, Baugstoffindustrie, No 10, Oct 1965, pp 296-299
JPRS 33125

Priority Tasks of the Cement, Lime, Gypsum, and Chalk Industry, by M. Meissner, 10 pp.
GERMAN, per, Baugstoffindustrie, No 10, Oct 1965, pp 302-305
JPRS 33125

Eastern Europe
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Status and Development of the Stoneware Industry of the GDR, by W. Geitel, 9 pp.
GERMAN, per, Baustoffindustrie, No 10, Oct 1965, pp 311-315
JPRS 33125

Shipping and Techniques, by Hans Hebberling, 37 pp.
GERMAN, per, Binnenschiffahrts-Nachrichten, No 22, 29 May 1965.
DIA LN 100-65

Recovery and Development of the Inland Port Capacity in the Years 1945-1965, by Heninrich Konigshofen.
GERMAN, per, Binnenschiffahrts-Nachrichten, No 22, 29 May 1965.
DIA LN 100-65

Diary of the Shipping Association for the Weser Area and Bremen and Kassel Groups, 37 pp.
GERMAN, per, Binnenschiffahrts-Nachrichten, No 22, 29 May 1965.
DIA LN 100-65

Free Trip to Rotterdam for the Barge Hugo Stinnes 12, 37 pp.
GERMAN, per, Binnenschiffahrts-Nachrichten, No 22, 29 May 1965, pp 357-373.
DIA LN 100-65

Inland Waterway Construction in the Federal Republic, by Prof, Franz J. Schroiff, 37 pp.
GERMAN, per, Binnenschiffahrts-Nachrichten, No 22, 29 May 1965, pp 375-377.
DIA LN 100-65

The Development of Freight Shipping in Inland Shipping After 1945, 37 pp.
GERMAN, per, Binnenschiffahrts-Nachrichten, No 22, 29 May 1965 p 383.
DIA LN 100-65

20 Years of Traffic Policy, by Dieter Wulf, 37 pp.
GERMAN, per, Binnenschiffahrts-Nachrichten, No 22, 29 May 1965, pp 385.
DIA LN 100-65

Eastern Europe
Economic (Contd)

Development of the Polish Chemical Industry, by Jan Korytkowski, 6 pp.
GERMAN, per, Chemische Technik, No 10, Oct 1965, pp 631-634
JPRS 33079

Scientific- Technical Cooperation of the CEMA Countries, by Nikolai Bogoroditsky, 14 pp.
GERMAN, per, Deutsche Außenpolitik, No 9, Sep 1965, pp 1107-1114.
JPRS 32778

Further Steps to Improve Planning and Management of Agriculture by Economic Measures in 1966, 11 pp.
GERMAN, per, Die Deutsche Landwirtschaft, No 9, Sep 65, pp 435-438.
JPRS 32666

Crop and Weather Report for the Period 11 August - 10 September 1965, by D. Krumbiegel, 6 pp.
GERMAN, per, Die Deutsche Landwirtschaft, No 10 Oct 1965, supplement 2 pp.
JPRS 32666

Crop and Weather Report for the Period 11 September- 10 October 1965, by D. Krumbiegel, 6 pp.
GERMAN, per, Die Deutsche Landwirtschaft, No 11, Nov 1965, supplement, 2 pp.
JPRS 33078

Order Concerning Formation and Utilization of the Technology Fund, 10 pp.
GERMAN, per, Gesetzblatt der Deutschen Demokratischen Republik, Part III, No 26, 19 Oct 1965, pp. 125-128.
JPRS 32962

Current Tasks of Economic Science, by Dr. Gunter Mittag, 5 pp.
GERMAN, per, Neues Deutschland, 2 Nov 1965, p. 4.
JPRS 33001

Continuous Casting Facilities in Poland's Metallurgical Plants, by Ignacy Mydlarz, 7 pp.
GERMAN, per, Neue Huette, No 10, Oct 1965, pp. 596-598.
JPRS 32948

Eastern Europe
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Effects of the New Economic Measures on Agriculture, by Christoph Oetmann, 5 pp.
GERMAN, per, Neuer Weg, No 16, Aug 65,
pp. 845-847
JPRS 32666

West Germany Interpretation of East Germany's Economic Reform and Rationalization of the Financial System, by Hannsjorg Buck, 29 pp.
GERMAN, per, SBZ-Archiv, No 14, Jul 1965,
pp. 218-220; No 16, Aug 1965, pp. 250-253;
No 17, Sept 1965, pp. 266-269.
JPRS 32962

Inland Waterway Shipping, 40 pp.
GERMAN, per, Verkehr, Ser 1, 1964.
DIA LN 130-65

The Supply of Lignite Briquettes According to Quality Specifications, by Dieter Mattuschka, 5 pp.
GERMAN, per, Die Wirtschaft, No 39,
30 Sep 1965, p 9.
JPRS 32775

Information on the Ludwigsfelde Automobile Works, by W. Friedrich, 6 pp.
GERMAN, per, Die Wirtschaft, No 40, 7 Oct 1965, pp. 6-7.
JPRS 33194

Status and Development of the Amelioration Cooperatives, by H. Hennberg and G. Seidel, 6 pp.
GERMAN, per, WRT Feldwirtschaft, Vol VI,
No 9, Sep 1965, pp 407-409.
JPRS 32666

Results of the Conference of Experts Concerning Electrification of OSZhD, by P. G. Muratov, 8 pp.
GERMAN, per, Zeitschrift der Organisation für die Zusammenarbeit der Eisenbahnen OSZhD, No 4, Jul-Aug 1965, pp. 1-4.
JPRS 33174

OSZhD Committee Reports, 22 pp.
GERMAN, per, Zeitschrift der Organisation für die Zusammenarbeit der Eisenbahnen OSZhD, No 4, Jul-Aug 1965, pp. 17-26.
JPRS 33174

Eastern Europe
Economic (Contd)

Electrification of the East German Railroads, 5 pp.
GERMAN, per, Zeitschrift der Organisation für die Zusammenarbeit der Eisenbahnen OSZhD, No 4, Jul-Aug 1965, pp. 29-31.
JPRS 33174

Secretary-General's Report at the General Meeting of the Scientific Society for Energy Economy on 15 December 1964, by Istvan Varga, 21 pp.
HUNGARIAN, per, Energias Atomtechnika, No 9, Sept 1965, pp. 401-411.
JPRS 33174

Long-Range Development of the Economy and Automation, by Arpad Kiss, 19 pp.
HUNGARIAN, np, Esti Hirlap, 9 Oct 1965.
JPRS 32679

Economic Programming of the Third Five-Year Plan, by Dr. Gustav Eager, 9 pp.
HUNGARIAN, np, Figyelo, 3 Nov 1965, p. 3.
JPRS 33195

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HUNGARIAN, per, Kozgazdasagi Szemle, No 9, Sep 1965, pp 1013-1029
JPRS 33076

Equilibrium of Purchasing Power and Commodity Supply, by Ferenc Zala, 17 pp.
HUNGARIAN, per, Kozgazdasagi Szemle, No 10, Oct 1965, pp. 1166-1181.
JPRS 33138

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HUNGARIAN, per, Kozgazdasagi Szemle, No 10, Oct 1965, pp. 1182-1196.
JPRS 33138

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HUNGARIAN, per, Statistikai Szemle, No 8-9, Aug-Sept 1965, pp. 787-807.
JPRS 33195

Eastern Europe
Economic (Contd)

General Principles of the Plan for the Development of Water Economy in 1961-1980, by Dr Kazimierz Matul, 10 pp.
POLISH, per, Gospodarka Wodna, No 8/9, Aug-Sep 1965, pp 294-296.
JPRS 32775

Water Resources in Poland, by Andrzej Stolarski, 11 pp.
POLISH, per, Gospodarka Wodna, No 8/9, Aug-Sep 1965, pp 297-300.
JPRS 32775

Polish Water Requirements and Hydro-Economic Balance, by Jerzy Tylko and Edmund Poszwa, 20 pp.
POLISH, per, Gospodarka Wodna, No 8/9, Aug-Sep 1965, pp 301-306
JPRS 32775

Certain Aspects of Cooperation Between CEMA Countries During 1964, 9 pp.
POLISH, per, Handel Zagraniczny, Vol I, No 10, Oct 1965, pp 444-447.
JPRS 32778

Metallurgical Value and Domestic Prices of Imported Ores, by Tadeusz Dankowski, 7 pp.
POLISH, per, Hutnik, No 9, Sept 1965, pp. 274-277.
JPRS 33045

Veb-Erfurt Press and Shear Factory, by Bernard Kowalski & Josef Romanowski, 8 pp.
POLISH, per, Mechanik, No 9, Sep 1965, pp 544-546
JPRS 33079

Horizontal Milling Machine FEA 50/63, by Janusz Klepas, 10 pp.
POLISH, per, Mechanik, No 9, Sep 1965, pp 555-558
JPRS 33079

Analysis of Economic Activities of Enterprises and Plants of the Petroleum Industry Association, by Jozef Pietrusza, 14 pp.
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JPRS 33045

Eastern Europe
Economic (Contd)

The Occurrence and Properties of Bituminous Shales in Poland, by Jerzy Badak, 9 pp.
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JPRS 33045

Petroleum Trust Production Task Performance: First Half 1965, 5 pp.
POLISH, per, Nafta, Year XXI, No 9, Sep 1965, pp 278-279.
JPRS 32775

Decisions on Increasing the Production and Marketability of Grain, 9 pp.
POLISH, per, Nowe Drogi, No 11, Nov 1965, pp 91-97.
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POLISH, per, Nowe Drogi, No 11, Nov 1965, pp 97-102.
JPRS 33078

Specialization in Pump Production by CEMA Countries, by Jan Faron, 10 pp.
POLISH, per, Przegląd Mechaniczny, Vol. XXIV, No 20, 25 Oct 1965, pp. 609-610.
JPRS 33194

Plans for the Tarnobrzeg Sulfur Area, by F. Pipala, 5 pp.
POLISH, per, Przegląd Techniczny, No 3, 17 Oct 1965, pp. 1, 4.
JPRS 32950

Development of the Fuel and Power Base in Poland, by Jan Mitrega, 8 pp.
POLISH, per, Przegląd Techniczny, No 3, 17 Oct 1965, pp. 5, 8.
JPRS 32950

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POLISH, per, Rudy i Metale Niezelazne, No 8, Aug 1965, pp. 447-453.
JPRS 32943

New Bulk-Buying Prices of Grains, by Jan Stelmach, 8 pp.
POLISH, per, Zycie Gospodarcze, No 45, 7 Nov 1965, p. 6.
JPRS 33137

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Building of Pipe Plant III in Zeithain,
by K. Zeippert, and K. Vogler, 6 pp.
GERMAN, per, Die Technik, Vol 20, No 20,
Oct 1965, pp. 672-674.
JPRS 32950

Problems of Dynamic Development of the Polish
Economy in 1961-1965, by Wladyslaw Dudzinski,
12 pp.
POLISH, per, Zycie Gospodarcze, No 45, 7 Nov
1965, pp. 1, 2.
JPRS 33138

Development of Economy during 1961-1965:
Uniform or Selective? by Wladyslaw Dudzinski,
9 pp.
POLISH, per, Zycie Gospodarcze, No 46, 14 Nov
1965, pp. 1, 6, 7.
JPRS 33195

The Contribution of Bank Credit to the
Development of the Chemical Fertilizer Industry,
by C. Fotache, 10 pp.
RUMANIAN, per, Finante si Credit, Vol 10, No
9, Sept 1965, pp. 33-41.
JPRS 32948

Current Problems in the Field of Invest-
ments, by Ion Patan, 11 pp.
RUMANIAN, per, Lupta de Clasa: Organ teor-
etic si politic al CC al PMR, Vol XLV,
Series V, No 10, Oct 1965, pp. 12-22.
JPRS 33111

Progress of the Chemical Industry During
the Five-Year Plan, by Mihail Florescu, 17 pp.
RUMANIAN, per, Probleme economice, No 9, Sep
1965, pp 19-33.
JPRS 32775

The Economic Effectiveness of Stockbreeding
in Industry-Type Farms, by N. David and G.
Popescu, 15 pp.
RUMANIAN, per, Probleme Economice, No 9,
Sep 1965, pp 63-76.
JPRS 32666

Principles of Area Distribution of Produc-
tion Forces, by I. Rachmuth, 19 pp.
RUMANIAN, per, Probleme Economice, No 10,
Oct 1965, pp. 17-31.
JPRS 33111

Eastern Europe
Economic (Contd)

Reduction of Specific Consumption in the
Chemical Industry, by S. Sapira and S.
Ghips, 17 pp.
RUMANIAN, per, Probleme economice, No 10,
Oct 1965, pp 70-83
JPRS 33125

The Rumanian Machine Construction Industry
during the Five Year Plan Period, by Mihai
Marinescu, 9 pp.
RUMANIAN, per, Probleme economice, Vol 18,
No 8, Aug 1965, pp. 26-35.
JPRS 32950

Economic and Organizational Consolidation of
Agricultural Production Cooperatives, by M.
Bulgaru, 14 pp.
RUMANIAN, per, Revista de statistica, Vol XIV, No 8,
Aug 1965, pp 22-34.
JPRS 33078

Socialist Industrialization and the
Contemporary Technical and Scientific
Revolution, by Gh. Cretoiu, 6 pp.
RUMANIAN, per, Viata Economica, No 44, 44
Oct 1965, pp. 3-4.
JPRS 32946

The Decisive Importance of a Rational
Utilization of Resources, by I. Desmire-
anu, 5 pp.
RUMANIAN, per, Viata Economica, No 43,
22 Oct 1965, p. 4.
JPRS 32946

Is It Justifiable to Build Thermoelectric
Power Plants in Yugoslavia?, by Vasilje
Veljkovic, 6 pp.
SERBIAN, per, Tehnika, No 11, Nov 1965,
pp 2025-2027
JPRS 33125

The Problem of Planning in Socialist
Countries, by Evgenij Mateev, 34 pp.
SERBOCROATIAN, per, Economist, Vol 18,
No 1-2, 1965, pp 1-25
JPRS 33276

Review of the Production and Consumption of
Unsaturated Polyester Resins in Yugoslavia,
5 pp.
SERBO-CROATIAN, per, Kemija u Industriji,
Jun 1965, pp. 464-465.
JPRS 32948

Eastern Europe
Economic (Contd)

Transportation and the New Economic Measures,
by Ante Zmijarevic, 8 pp.
SERBO-CROATIAN, per, Medjunarodni transport,
Vol XI, No 8-9, Aug-Sept. 1965, pp. 2-4.
JPRS 33138

The Economic Position of Railroad Transporta-
tion under the New Economic Measures, by Milo-
rad Bibic, 11 pp.
SERBO-CROATIAN, per, Medjunarodni transport,
Vol XI, No 8-9, Aug-Sept 1965, pp. 46-50.
JPRS 33138

The Temporary Employment of Yugoslav Citizens
Abroad, by Dr Miloje Nikolic, 12 pp.
SERBO-CROATIAN, per, Privredni vjesnik,
29 Nov 1965, pp 5-6
JPRS 33276

Political

Shortcomings in the Work of Party Cadres for
the Political Education of the Masses, by
Spiro Caro, 7 pp.
SERBIAN, per, Ruga e Partise, No 9, Sep 1965,
pp 30-26
JPRS 32983

The Lessons from the Struggle for Unity of
the Working Class and the Democratic Forces,
13 pp.
BULGARIAN, per, Novo vreme, No 10, Oct 1965,
pp. 3-12.
JPRS 33110

The Growing Role of the Intelligentsia
in the Building of Socialism, by Marko Markov,
16 pp.
BULGARIAN, per, Novo vreme, No 10, Oct 1965,
pp. 13-26.
JPRS 33110

The Problem of War, Peace and Revolution, by
Kostadin Baychinski, 15 pp.
BULGARIAN, per, Novo vreme, No 10, Oct 1965,
pp. 95-107.
JPRS 33110

Eastern Europe
Political (Contd)

Bulgarian CP Speaks on the Struggle Against
Imperialism and the Unity of the Communist
Movement, by Ivanov, 10 pp.
BULGARIAN, np, Rabotnishesko Delo, 8 Oct
1965, pp 2 and 3.
JPRS 32673

Consideration of an Outline For the
Development of Scientific Research Until
1970, by Josef Chvatal, Jiri Nekola, et al,
38 pp.
CZECH, per, Vestnik Ceskoslovenske Akademie
Ved, Vol LXXIII, No 5, 1964, pp 737-777.
ACSI 1-8495
ID 2204050465

They Anchored in Freedom, 37 pp.
GERMAN, per, Binnenschiffahrts-Nachrichten,
No 22, 29 May 1965, pp 380.
DIA LN 100-65

Friedrich Ziebell Saved Bremen's Port,
37 pp.
GERMAN, per, Binnenschiffahrts-Nachrichten,
No 22, 29 May 1965, 382 p
DIA LN 100-65

Politically Burdened Elbe Shipping,
by Helmuth Rhenius, 5 pp.
GERMAN, per, Wirtschafts-Correspondent,
No 18, 6 May 1965, pp 64-66.
DIA LN 128-65

The GDR — Should It Be Simply Written
Off?, by Martin Jaenicke, 9 pp.
GERMAN, np, Die Zeit, 1 Oct 1965, p 3
JPRS 32924

Excerpts from Stefan Heym Novel, by Stefan
Heym, 5 pp.
GERMAN, np, Die Zeit, 5 Nov 1965, p. 5.
JPRS 32958

"This Is What I Saw in Vietnam — 'Into
War — with a Timetable'" , by Ervin Beti,
HUNGARIAN, np Eti Hirlep, 9 Oct 1965 -
19 Oct 1965
JPRS 32,670

Eastern Europe
Political (Contd)

Marxism and Peaceful Coexistence, by Jerzy J. Wiatr, 8 pp.
POLISH, per, Polityka, No 45, 6 Nov 1965,
p. 9.
JPRS 33110

The Characteristics of the New Constitution
of the Socialist Republic of Rumania, by
Mircea Lepadatescu, 10 pp.
RUMANIAN, per, Justitia Noua, Vol 21, No 8,
1965, pp. 3-18.
JPRS 32958

Military

The Military Medical Service in the
Federal German Republic, by J. DeLange, 19 pp.
DUTCH, per, Nederlands Militair
Geneeskundig Tijdschrift, No 2, 1965,
pp 44-56.
DIA LN 111-65

Military Blood Transfusion Service Under
Peacetime Conditions, by J. P. Kool, 19 pp.
DUTCH, per, Nederlands Militair Geneeskundig
Tijdschrift, No 2, 1965, pp 61-68.
DIA LN 111-65

Balanced Power-Modern Sea Power Represented by
the Example of the U.S. Sixth Fleet,
by Gerhard Elser, 23 pp.
GERMAN, per, Marine-Rundschau, No 6, 1965,
pp 123-240.
Dept of Navy Tr 4364/ONI 2013

V1 and V2: The History of a Weapon,
by Wolf Laukamm, 22 pp.
GERMAN, per, Soldat and Technik, Sep 1964,
pp 509-513.
Dept of Navy Tr 4327/ONI 2002

Mission of the Antitank Unit 106 cm r PAK,
by Dieter Deller, 18 pp.
GERMAN, per, Truppenanst, No 1, 1964, pp 18-23.
ACSI I-7854
ID 2204037765

Eastern Europe
Military (Contd)

Temporary Instructions for Anti-Aircraft
Defense by Ground Forces Subunits, by
Norbert Falkowski, 6 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 5-10.
DIA LN 295-D
ID 28780193-65

Intervention by Militia in Dealing With
Soldiers, by Aleksander Saulewicz, 8 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 11-18.
DIA LN 295-D
ID 28780193-65

Commanding the Subunits in Enemy Rear,
by K. D.; N. S. 12 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12, 1964,
pp 19-29.
DIA LN 295-D
ID 28780193-65

The Motorized Infantry Company Defending a Water
Barrier, by Marian Garbien, 9 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 30-38.
DIA LN 295-D
ID 28780193-65

Tank Company Operating in Independent
Direction, by Stanislaw Masiarczyk, 10 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 39-49.
DIA LN 295 D
ID 28780193-65

Tactical Exercise of The Anti-Aircraft
Artillery Gun Crew, by Alojzy Chmiel
6 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 50-54.
DIA LN 295-D
ID 28780193-65

Monitoring of Contamination and Exposure
in Setting up a Crossing Point, by
Jan Jezierski, 8 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 58-64.
DIA LN 295-D
ID 28780193-65

**Eastern Europe
Military (Contd)**

How to Teach Accurate Firing, by
Mieczyslaw Rydzewski, 8 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 67-73.
DIA LN 295-D
ID 28780193-65

Firing Training Can be Cheaper and Better,
by Edward Wieczorek, 9 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 74-82.
DIA LN 295-D
ID 28780193-65

The Neutralization of the Enemy March
Column With the Fire of one Artillery Battery,
by Bazyli Lewczuk, 5 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 83-88.
DIA LN 295-D
ID 28780193-65

Training of Personnel for the Operation of
the EM - 61 Range Finder, by Antoni Guzinski,
9 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 89-95.
DIA LN 295-D
ID 28780193-65

Quick Tying in Method for the Combat
Formation in the Artillery Division (Battery),
by Roman Ogrodnik, 5 pp.
POLISH, per, Przegląd Wojsk Lądowych,
No 12, 1964, pp 96-100.
DIA LN 295-D
ID 28780193-65

Need to Examine Teaching Methods in Military
Courses, by Edmund Garlicki, Jerzy Stefaniak,
9 pp.
POLISH, per, Przegląd Wojsk Lądowych,
No 12, 1964, pp 101-108.
DIA LN 295-D
ID 28780193-65

Preparation of Graphic Documents by
Combat Engineer Submit Commanders, by
Tadeusz Gwardak, 8 pp.
POLISH, per, Przegląd Wojsk Lądowych,
No 12, 1964, pp 109-117.
DIA LN 295-D
ID 28780193-65

**Eastern Europe
Military (Contd)**

The Training of Radio Telegraphists, by
Kazimierz Pachowski, 11 pp.
POLISH, per, Przegląd Wojsk Lądowych,
No 12, 1964, pp 118-127.
DIA LN 295-D
ID 28780193-65

Servicing the "Robur LO-1800 A Vehicle,
by Pawel Adamski, Stanislaw Nizinski, 15 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 128-140.
DIA LN 295-D
ID 28780193-65

Maneuverability and Dynamics in Modern
Combat, by G. Chetagurow, 6 pp.
POLISH, per, Przegląd Wojsk Lądowych,
No 12, 1964, pp 141-145.
DIA LN 295-D
ID 28780193-65

Combat Capabilities of a Company and Its Role in
Modern Warfare, by M. Deshko, I. Semenov, 8 pp.
POLISH, per, Przegląd Wojsk Lądowych,
No 12, 1964, pp 146-152.
DIA LN 295-D
ID 28780193-65

Artillery Insuring the Tactical Air Landing,
by Franciszek Dziedzic, 8 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 153-159.
DIA LN 295-D
ID 28780193-65

Command and Communication in Motorized Infantry
Units, by V. Khoklov, 8 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 12,
1964, pp 160-165.
DIA LN 295-D
ID 28780193-65

Group Flights of Helicopters in Assault
Landing of Forces,
POLISH, per, Wojskowy Przegląd Lotniczy, No 3,
Mar 1965, pp 8-14.
DIA LN 150-65
ID 28

Eastern Europe
Geographic

New Discoveries on the Reptilian-mammalian Borderline, by Z. Kielan-Jaworska.
POLISH, per, Kosmos, Vol XII, No 2, 1963, pp 137-149.
*Dept of Navy/APL No J-686

Humedoara Regiune -- A Geographic Description, by I. S. Gruescu, b. Vulcu, 16 pp.
RUMANIAN, per, Natura, Seria Geografie-Geologie, No 4, 1965, pp 15-28A
ACSI I-8560A
ID 2204051365

Sociological

Report of Politburo of Albanian Workers Party Central Committee on Expansion of the Role of Literature and Arts in Education of Masses, by Ramiz Alia, 39 pp.
ALBANIAN, np, Bashkimi, 28 Oct 1965, pp. 1, 2, 5, 6.
JPRS 33004

Current Problems of the School System and School Reform, by Wacław Tulodziecki, 27 pp.
POLISH, per, Głos Naukowców, No 45, 7 Nov 1965, pp 5-8
JPRS 33275

Changes in Structure of Working Force Brought About by Industrialization, by Ilie Radulescu, 6 pp.
RUMANIAN, per, Contemporanul, No 42(992), 15 Oct 1965, pp 1, 8-9
JPRS 33275

Schools for Skilled Workers, by M. Zivkovic, 12 pp.
SERBIAN, per, Socijalna Politika, No 7-8, Jul-Aug 1965, pp. 749-758.
JPRS 32967

Education of Producers as a Social Investment, by Stevan Bezdanov, 21 pp.
SERBO-CROATIAN, per, Socijalizam, Vol 8, No 7-8, Jul-Aug 1965, pp. 1035-1053.
JPRS 32967

WESTERN EUROPE

Economic

The Rhine Canalization,
DUTCH, per, Publikatie, No 275,
DIA LN 179-65
ID 2868013265

Germany's Inland Navigation, 5 pp.
FRENCH, per, Revue de la Navigation Interieure et Rhenane, No 3, 10 Feb 1965, pp 96-97.
DIA LN 183-65

The Canalization of the Saar River, 5 pp.
FRENCH, per, Revue de la Navigation Interieure et Rhenane, No 3, 10 Feb 1965, pp 97.
DIA LN 183-65

Activity of the Secretariat of Communications, by Secretary of State for Communications, 6 pp.
SPANISH, per, Postas Argentinas, No 303, pp 13-16.
DIA LN 175-65

Political

Jespersen's Speech to 22nd Danish CP Congress, 8 pp.
DANISH, np, Land og Folk, 6 Nov 1965, pp. 6-7.
JPRS 32961

Danish CP Issues Political Manifesto at 22nd Congress, 7 pp.
DANISH, np, Land og Folk, 14-15 Nov 1965, pp. 7-8.
JPRS 33026

Communist Party Will Take Initiative in Socialist Movement Says Barendregt, 10 pp.
DUTCH, per, De Brug, No 11, 1 May 1965, pp. 4-6; No. 12, 22 May 1965, pp. 4-5.
JPRS 32878

Western Europe
Political (Contd)

Ville Pessi: Theoretical, Practical Discussion Necessary for Progress of Socialism, by Ville Pessi, 6 pp.

FINNISH, np, Kansan Uutiset, 19 Oct 1965, p. 4.
JPRS 32878

Finnish CP Central Committee Clarifies Concept of Role of the Workers, 8 pp.

FINNISH, np, Kansan Uutiset, 21 Oct 1965, pp. 8-9.
JPRS 32961

Saarinen Discusses Central Questions of Socialist Renewal in Finland, by Aarne Saarinen, 5 pp.

FINNISH, per, Kommunisti, No 10, 1965, pp. 338-341.
JPRS 32878

Cooperation between Christians and Communists Discussed by French CP Theoretical Journal, by Andre Moine, 10 pp.

FRENCH, per, Cahiers du Communisme, Vol 41, No 10, Oct 1965, pp. 142-149.
JPRS 32850

Burnelle Urges Participation in Country's Political Life, 5 pp.

FRENCH, per, Le Drapeau Rouge, 12 Nov 1965, pp. 4-5.
JPRS 33026

French CP Secretary-General Explains Support of Mitterand Candidacy, by Claude Estier, 11 pp.

FRENCH np, L'Humanite, 14 Oct 1965, p 4.
JPRS 32673

Le Monde Discusses French-Russian Relations, by Andre Fontaine, 17 pp.

FRENCH, np, Le Monde, 17, 18 & 19 Nov 1965, pp 1, 2, 8, 6
JPRS 33291

Belgian CP Attacks Revisionism of Drapeau Rouge, by Jacques Grippa, 7 pp.

FRENCH, per, La Voix du Peuple, No 44, 29 Oct 1965, p. 4.
JPRS 33026

Western Europe
Political (Contd)

Italian Catholic Journal Discusses Conditions for Dialogue of Communists and Catholics, by Ulisse Alessio Floridi, S.I., 29 pp.

ITALIAN, per, La Civiltà Cattolica, Vol II, No 8, 17 Apr 1965.
JPRS 32673

The Diary of Togliatti (1944-1945), by Massimo Caprara, 21 pp.

ITALIAN, per, Il Contemporaneo, No 8, Aug 1965, pp. 3-8.
JPRS 32886

A Debt of Gratitude, by Ernst Fischer, 6 pp.

ITALIAN, per, Il Contemporaneo, No 8, Aug 1965, pp. 9 & 10
JPRS 32886

First Formulation of Polycentrism in Moscow in 1943, by Veljko Vlahovic, 5 pp.

ITALIAN, per, Il Contemporaneo, No 8, Aug 1965, pp. 11-12.
JPRS 32886

Unpublished Letter by Togliatti on the Rearmament of Nazi Germany, 6 pp.

ITALIAN, per, Il Contemporaneo, No 8, Aug 1965, pp. 13, 15.
JPRS 32886

The Principal Enemy in 1935, by Franco Ferri, 8 pp.

ITALIAN, per, Il Contemporaneo, No 8, Aug 1965, pp. 13, 15, 16 and 17.
JPRS 32886

Roman History As Taught in Fascist Schools, by Ranuccio Bianchi Bandinelli, 5 pp.

ITALIAN, per, Il Contemporaneo, No 8, Aug 1965, pp. 17-18.
JPRS 32886

Palmito Togliatti and the History of Italy, by Ernesto Ragionieri, 12 pp.

ITALIAN, per, Il Contemporaneo, Aug 1965, pp. 24-27.
JPRS 32886

Western Europe
Political (Contd)

Lana's Speech to the Executive Committee of the CGIL, 14 pp.
ITALIAN, per, Rassegna Sindacale, No 72, 17 Oct 65, pp 21-23.
JPRS 32976

Foa's Speech at the WFTU Congress, 6 pp.
ITALIAN, per, Rassegna Sindacale, No 72, 17 Oct 65, pp 24-25.
JPRS 32976.

He Worked to the Last, 7 pp.
ITALIAN, per, Rinascita, No 34, 28 Aug 1965, pp. 3-4.
JPRS 32886

Palmiro Togliatti: Culture and Method, by Luciano Gruppi, 7 pp.
ITALIAN, per, Rinascita, No 37, 18 Sept 1965, pp. 23-24.
JPRS 32886

Rossana Rossanda Answers Gruppi on Marx' Theory on History, 10 pp.
ITALIAN, np, Rinascita, No 45, 13 Nov 1965, pp. 22-23.
JPRS 33136

Italy's Report on the WFTU Congress, by Fidia Sassano, 6 pp.
ITALIAN, per, Tempi Moderni, No 22, Jul- Sep 65, pp 161-164.
JPRS 32976.

CGIL Votes to Remain in the WFTU, 5 pp.
ITALIAN, np, L'Unita, 2 Oct 1965, pp 1,10.
JPRS 32976

Excerpts from Luigi Longo's Pre-Congressional Speech, 17 pp.
ITALIAN, np, L'Unita, 27 Oct 1965, pp. 1, 10, 11, 12.
JPRS 33035

The PCI's Pre-Congressional Debate, 32 pp.
ITALIAN, np, L'Unita, 28 Oct 1965, pp. 1, 12; 29 Oct 1965, p. 10; 30 Oct 1965, pp. 10, 11, 12; 31 Oct 1965, pp. 12, 13, 14; 31 Oct 1965, p. 14; 31 Oct 1965, p. 1.
JPRS 33035

Western Europe
Political (Contd)

Longo's Final Speech at the Pre-Congressional Meeting of the PCI, 6 pp.
ITALIAN, np, L'Unita, 31 Oct 1965, p. 14.
JPRS 33035

Report on the Leadership in the Defense - The Hauge Committee, Published by Haerens Offisers Forbund, 53 pp.
NORWEGIAN, per Offisersbladet, No 4, Apr 1965, Oslo, Norway, pp148-165.
DIA LN 44-65

Creative Peace and Fruitful Labor; a Message to the Ecuadorian Nation.
SPANISH, rpt, Paz Creadora y Trabajo Fecundo, Mensaje a La Nacion Ecuatoriana, July 1963-July 1964.
DIA LN-12-65
ID 2828006965

Holmberg Denies Charges of Factionalism, by Nils Holmberg, 10 pp.
SWEDISH, per, Marxistiskt Forum, supplement to No 2, 1965, pp 1-8
JPRS 32899

Military

Trans-Equatorial Communications Agency (A.T.E.C.)
FRENCH, rpt, L'Agence Transequatoriale des Communications (A.T.E.C.), 12 October 1964.
DIA LN 180-65
ID 2820018464

In an Exclusive Statement of Brother Boumedienne to El-Djeich "The Popular Force, the A. N. P. is a Dynamic Element of the Revolution, 5 pp.
FRENCH, per, El-Djeich, No 19, Oct 1964, pp 1-2. Atch to IR 2-802-0226-64
DIA LN 161-65

Espionage in the Atomic Age: Fantasy or Reality? 25 pp.
FRENCH, rpt, L'Espionnage a l'Ere Atomique: Theme de roman Ou Realite?
ACSI Y-8709
ID 2204057965

Western Europe
Military (Contd)

The Military Operation in Viet Nam, by,
Fausto Maria Bortolani
ITALIAN, rpt, Le Operazioni Militari Nel Vietnam,
9 October 1965.
DIA LN261-65
ID 2899016165

Attack With Force! by Claus Romo von
Glasenapp, 7 pp.
PORTUGUESE, per, Boletim do Clube Naval,
No 182, 2nd, Quarter, 1965, pp 135-143.
DIA LN 176-65

Code of Military Justice, 73 pp.
SPANISH, rpt, Codigo de Justicia Militar,
ACSI I-7612
ID 2204027565-V

Sociological

Socialist Trade Unionists for Withdrawal from
WFTU, 8 pp.
ITALIAN, np, Avanti!, 2 Oct 65, pp 1, 7
JPRS 32976

AFRICA

Economic

How West Africa Can Survive, by Samir Amin,
5 pp.
FRENCH, per, Africa, Vol 7, No 36, Jun-Jul
1965, pp 9, 11-12
JPRS 32977

Progress in the Industrialization of Algeria,
5 pp.
FRENCH, per, Le Monde Diplomatique, Vol 12,
No 139, 20 Oct 1965, p. 13.
JPRS 32934

Africa
Economic (Contd)

Recovery of Algerian Mining Industry, 6 pp.
FRENCH, per, Le Monde Diplomatique, Vol 12,
No 139, 20 Oct 1965, p. 17.
JPRS 32934

Intra-Africa, by Manga Bekombo, 11 pp.
FRENCH, per, Presence Africaine, No 55,
3rd Quarter 1965, pp 135-144
JPRS 33084

The Role of the Wizard Among the Denka, by
Father Ivo Ciccacci, 9 pp.
ITALIAN, per, Nigeria, 10 Oct 1965, p 24
JPRS 32977

Political

Report on the Operations of the Pasteur
Institute of Madagascar in 1963,
111 pp.
FRENCH, rpt, 1964, Tannarive, Madagascar,
DIA LN 21-65

ANP Achievements and Modernization, by
Office of the Political Commissariat,
40 pp.
FRENCH, rpt, July 1964, Algiers, Algeria,
Atch to IR 2-802-0171-64,
DIA LN 163-65

Sudan -- A Priority Problem, by Jean-Louis
Ietter, 5 pp.
FRENCH, per, Afrique-Express, Vol 5, No 103,
25 Oct 1965, pp. 15-17.
JPRS 32934

KNDF Secretary-General Denies Statements of
Tandeng Muna, by Nzo Ekshah-Nghaky, 5 pp.
FRENCH, np, L'Effort Camerounais, Vol 11,
No 511, 24 Oct 1965, pp. 1-3.
JPRS 33009

Counterrevolution in Algeria, by Robert
Lemasson, 5 pp.
FRENCH, per, L'Internationale, No 37, Oct
1965, pp. 4-5.
JPRS 32934

Africa
Political (Contd)

Congo (Leopoldville), by Bernard Matuvanga Lubiku, 8 pp.
FRENCH, per, Remarques Africaines, Vol 7, No 249, 22 Sep 1965, pp 6-9
JPRS 32977

The United States and Black Africa in the Light of the Withdrawal of the U. S. Ambassador from Brazzaville, by J. C. Froelich, 18 pp.
FRENCH, per, Revue de Defense Nationale, Vol. 21, Nov 1965, pp. 1712-1728.
JPRS 33168

Will Africa Adopt the Chinese Way?, by Giuseppina Finazzo, 6 pp.
ITALIAN, per, Africa, Vol 20, No 3, Sep 1965, pp 312-316
JPRS 33062

Military

Fed Supplies Road Equipment to Congo (Brazzaville), 5 pp.
FRENCH, per, Afrique-Express, Vol 5, No 103, 25 Oct 1965, pp. 30-31.
JPRS 32954

Activities of French Volunteers for Progress in Dahomey, 6 pp.
FRENCH, per, Bulletin Quotidien d'Information, 2 Nov 1965, pp 1-3 & 3 Nov 1965, pp 3-4
JPRS 33084

Technical Assistance of the Air Force to the Congo, by Amilpress, 6 pp.
FRENCH, per Nos Forces, 15-21 Jul 1965, DIA LN 206-65

Africa
Sociological

A Defense of African Culture and Language, by Ibrahima Kourouma, 6 pp.
FRENCH, np, Horoya, 12, 14 and 15 Oct, pp. 4, 5, and 4, respectively.
JPRS 32816

The Land and the People of the KWILU Area of Congo (Leopoldville), by Henri Nicolai, 26 pp.
FRENCH, per, Les Cahiers d'Outre-Mer, Vol 17, No 67, Jul-Sept 1964, pp. 292-313.
JPRS 32934

The Civil Code in Senegal: Tradition Adapted to the Modern World, by Gabriel Arrighi, 14 pp.
FRENCH, per, Renant, Vol 75, No 706, Apr-Jun 1965, pp 155-169
JPRS 33062

The Somali Government Vis-a-Vis the Nomads, by L. Wueste, 7 pp.
GERMAN, per, Afrika Heute, No 18, 1 Oct 1965, pp. 243-246.
JPRS 32954

MIDDLE EAST

Political

Greek Left Shirks Duty to Unite Masses Against Papandreu, 24 pp.
GREEK, per, Anagennisi, Nos 10-11, Jul-Aug 1965, pp 1-13
JPRS 33280

Greek Left Wavers in its Struggle Against Imperialism, 17 pp.
GREEK, per, Anagennisi, Nos 10-11, Jul-Aug 1965, pp 32-40
JPRS 33280

Mikunis Speech, by Shmuel Mikunis, 8 pp.
HEBREW, np, Kol Haan, 24 Sep 1965, pp 2,3.
JPRS 32599

Middle East
Political (Contd)

A Talk with Dr Zibanski, Rescuer of Jews
from Poland, by Yaron Becker, 7 pp.
HEBREW, per, Kol Haam, 22 Oct 1965, pp 3,6
JPRS 33280

A Letter to A Member of Mapam, 5 pp.
HEBREW, np, Kol Haam, 29 Oct 1965, p 2, 7
JPRS 33280

"Kadesh" Operation in a New Light, by
Yitshar Portnoy, 7 pp.
HEBREW, np, Lamerhav, 17 Oct 1965, pp. 3, 10.
JPRS 33169

Military

Profile of Colonel Erik Sharon, by Yadin
Dudai, 18 pp.
HEBREW, np, Bamahaneh, 13 Oct 1965, pp. 8-11.
JPRS 33169

Interview with Armor Commander, by Yadin
Dudai, 8 pp.
HEBREW, np, Bamahaneh, 25 Oct 1965, pp. 8, 9.
JPRS 33169

Sociological

Strengthening the Authority of the Working
People's Forces, 6 pp.
ARABIC, per, al-Talish, Oct 1965, pp 5-9
JPRS 33280

FAR EAST

Economic

Agricultural High Yield in Irrigated
Areas, by Yuan Lang, 5 pp.
CHINESE, per, Hung-t'ien Shui-li Yu Shui-
t'u Pao-ch'ih, No 7, 9 Jul 1965, pp 8-9.
JPRS 32970

Reduction of Irrigation and Drainage Costs
by Yang Idu-wu, 8 pp.
CHINESE, per, Hung-t'ien Shui-li Yu Shui-
t'u Pao-ch'ih, No 8, 9 Aug 1965, pp 11-13.
JPRS 32970

Improve Charting in Order to Set Ships on
the Right Course, 5 pp.
CHINESE, per, Shui-yun, No 8, 7 Aug 1965,
pp. 12-13.
JPRS 33156

Knowledge Stems from Practice, by Kao Chih-
ming (7559 1807 2494), 12 pp.
CHINESE, per, Shui-yun, No 8, 7 Aug 1965,
pp. 17-21.
JPRS 33156

The Formation and Development of Chinghai
Lake, by Chen K'o-tsao & Huang Ti-fan, 37 pp.
CHINESE, per, Ti-li Hsueh-pao, Vol 30, No 3,
1964, pp 214-230
JPRS 33311

The Growth of Cities and Towns as Related
to Agricultural Development in Soochow-Wuhai
District, by Yen Chung-min & Liu Chun-te,
30 pp.
CHINESE, per, Ti-li Hsueh-pao, Vol 30, No 3,
1964, pp 234-246
JPRS 33311

A Preliminary Analysis of the Agro-Climate of
the Chinling Region, Western Shanai, by
Chen Ming-jung, 32 pp.
CHINESE, per, Ti-li Hsueh-pao, Vol 30, No 3,
1964, pp 248-258
JPRS 33311

Far East
Economic (Contd)

On Historical Droughts in Honan Province,
by Hsiao Ting-k'uei & P'eng Fang-ts'ao,
32 pp.

CHINESE, per, Ti-li Hsueh-pao, Vol 30,
No 3, 1964, pp 259-271
JPRS 33311

Intensify the Revolutionary Offensive on
the Clothing Level, by Eng. Sakirman,
13 pp.

INDONESIAN, np, Harian Rakyat, 20 and 21
Sep 1965, p 3.
JPRS 32651

Handbook of Ports of Shelter (for Small Ships)
(5) Northeastern Part of North Kyushu,
(Including Bungo Channel
JAPANESE, rpt, Oct 1964.
DIA LN 241
ID 5852018265.

The Developing Sugar Refining Industry,
by Yang Chang-jen, 6 pp.
JAPANESE, per, Jinmin Chugoku, No 10, 5 Oct
1965, pp. 78-79.
JPRS 33140

Construction Almanac 1946-1965, 15 pp.
KOREAN, per, Ko'neh'uk kwa Ko'nso'l, Aug
1965, pp. 28-37.
JPRS 33180

Building a Self-Supporting National Economy
and the Basic Line of Economic Construction,
by Chon Chong-hui, 18 pp.
KOREAN, per, Kyongje Yonku, No 3, 1965,
pp. 3-14.
JPRS 33047

A Balanced Improvement in the Lives of
Workers, Office Workers and Farmers, by Kim
Won-sam, 13 pp.
KOREAN, per, Kyongje Yonku, No 3, 1965,
pp. 15-22.
JPRS 33047

The Socio-Economic Causes of the Distinction
Between Town and Country, by Yi Myong-u,
12 pp.
KOREAN, per, Kyongje Yonku, No 3, 23 Sept
1965, pp. 23-30.
JPRS 33047

Far East
Economic (Contd)

The Most Important Tasks of Accountants and
Financial Workers, by J. Tserendorj and P.
Sosorbaram, 8 pp.

MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal,
No 4, Aug 1965, pp. 6-12.
JPRS 32951

The Local Revenue Plans Must Be Fulfilled
Uniformly, by N. Ochirbal, 6 pp.

MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal,
No 4, Aug 1965, pp. 16-20.
JPRS 32951

Economist L. Banjid on the Ways of Improving
the Exploitation of the Animal Transport,
6 pp.

MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal,
No 4, Aug 1965, pp. 21-25.
JPRS 32951

N. Baasanjab Discusses A Need for Thrifty
and Effective Use of the Budget Funds, by N.
Baasanjab, 5 pp.

MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal,
No 4, Aug 1965, pp. 26-29.
JPRS 32951

From the Practical Experience in Fattening
the Cattle on Pastures under the Conditions
Prevailing in the Mongolian People's Republic,
by D. Gonchig, 8 pp.

MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal,
No 4, Aug 1965, pp. 30-36.
JPRS 32951

Testimony of Defense Attorneys, by D. Horloo,
5 pp.

MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal,
No 4, Aug 1965, pp. 59-62.
JPRS 32951

Industrial Accounting and Cost Accounting
Must Be Improved, by B. Jan'yan, 6 pp.

MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal, No 7, Jul
1965, pp 25-29.
JPRS 32650

Pasture Resources and Opportunities to Use
Them Properly, by Geobotanists G. Erdene-
jab and D. Banderagch, 5 pp.

MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal, No 7, Jul
1965, pp 30-33.
JPRS 32650

Far East
Economic (Contd)

Finance and Credit in the Democratic Republic of Vietnam, by Bostorguyev. (NY-13044)
RUSSIAN, bk, Financi i Kredit Dem Rep Vietnam, Moscow, 1965, pp 1-135.
JPRS

The Technical-Material Base of Agriculture is Being Expanded, 9 pp.
SPANISH, np, Cuba Socialista, Nov 1965, pp 130-138
JPRS 33105

New Spirit of Production and Combat among Soldiers and Citizens of Quang-Binh Province, by Nguyen Tu Thoan, 6 pp.
VIETNAMESE, np, Chinh Nghia, No 524, 3 Oct 1965, p. 1.
JPRS 33037

Pham Hung on Economic Construction and Development in the New Situation, 26 pp.
VIETNAMESE, per, Hoa Tan, No 11, Nov 1965, pp 1-13
JPRS 33317

Winter-Spring Production Season, 9 pp.
VIETNAMESE, per, Hoa Tan, No 11, Nov 1965, pp 14-18
JPRS 33317

Developing Local Industry, by Nguyen Chanh, 13 pp.
VIETNAMESE, per, Hoa Tan, No 11, Nov 1965, pp 55-62
JPRS 33317

Achievements in Ten Years of Socialist Industrialization, by Le Vinh, 12 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, 28 Aug 1965, pp 9-13 & 26
JPRS 32807

The Effectiveness of Investment in Capital Construction, by Bui Van Cac, 18 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, 28 Aug 1965, pp 27-35
JPRS 32807

Far East
Economic (Contd)

Enterprise Organization and Management, by Le Hong Tam, 13 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, 28 Aug 1965, pp 41-47
JPRS 32807

Use of Labor in State Controlled Economy, by Tran Dang Van, 7 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, 28 Aug 1965, pp 48-51
JPRS 32807

Duckweed for the Winter-Spring Crop, by Truong Quoc Thai, 6 pp.
VIETNAMESE, np, Nhan Dan, 16 Oct 1965, p 2
JPRS 32974

Push This Winter-Spring Crop, 6 pp.
VIETNAMESE, np, Nhan Dan, 18 Oct 1965, p 2
JPRS 32974

Pham Hung on Economic Construction and Development in the New Situation, 26 pp
VIETNAMESE, np, Nhan Dan, 24 and 25 Oct 1965, No 10, 1965
JPRS 32929

Production Direction for the Mountainous Regions, by Nguyen van Man, 6 pp.
VIETNAMESE, np, Nhan Dan, 1 Nov 1965, p. 2.
JPRS 33176

Political

Kashmir -- The Apple of Discord, by S. Mikoyan, 6 pp.
RUSSIAN, per, Literaturnaya gazeta, 28 Oct 1965, p 4
JPRS 32804

Ideological Guidance of Our Graduating Students, 5 pp.
CHINESE, per, Che-chiang Chiao-yu, No 4, Apr 1965, pp. 13,14
JPRS 33142

Far East
Political (Contd)

An Educational Theory Mislabeled Marxist, by Hsu Tsung-shih (6079 1350 1385), 8 pp. CHINESE, per, Che-chiang Chiao-yu, No 4, Apr 1965, pp. 16-18. JPRS 33142

The Chinese Line on the Israel Question, by Beral Balti, 5 pp. HEBREW, Ap, Kol Haam, 29 Oct 1965, pp 3,6 JPRS 33280

Southeast Asia Research Institute: Southeast Asia Fact Book (1965). JAPANESE, bk, Tokyo, 1965, pp a-3 and 1-113 (less pp 46-55). *ACSI I-7846 10 2204036865

Socialistic Patriotism and Local Patriotism, by Ch'oe Sun-t'ae, 8 pp. KOREAN, per, Kulloja, No 17, 1965, 5 Sept 1965, pp. 27-31. JPRS 33041

The Victory of Our Party's Foreign Policy, by Kim Yong-nam, 11 pp. KOREAN, per, Kulloja, No 18, 20 Sep 1965, pp 2-9 JPRS 33072

The Certain Victory of our People Under The Leadership of the Korean Workers Party, 6 pp. KOREAN, per, Kulloja, Vol 19, 5 Oct 1965, pp 2-6 JPRS 33123

Subjective Thought is Independent Communist Thought, by Sin Chin Kyun, 20 pp. KOREAN, per, Kulloja, No 19, 5 Oct 1965, pp 7-21 JPRS 33123

The Cultural Revolution in Our Country, by Kim Song-ki, 10 pp. KOREAN, per, Kulloja, No 19, 5 Oct 1965, pp 33-40 JPRS 33123

The Ch'o'llima Movement is the Embodiment of Our People's Revolutionary Will, by No Pyo'ng-hun, 14 pp. KOREAN, per, Kulloja, No 19, 5 Oct 1965, pp 41-51 JPRS 33123

Far East
Political (Contd)

The Struggle for the Party's Organizational and Ideological Stability, by Kim Ruk-hun, 14 pp. KOREAN, per, Kulloja, Vol 19, 5 Oct 1965, pp 52-64 JPRS 33123

A Museum is a Center of Propaganda Workshops, by Sh. Magban, 6 pp. MONGOLIAN, per, Naryn Am'dral, No 7, pp 13-17. JPRS 32650

Role of Party Organizations in the Selection and Distribution of Cadres, by M. Imbantsoren, 6 pp. MONGOLIAN, per, Naryn Am'dral, No 7, Jul 1965, pp 18-24. JPRS 32650

We Are Determined to Bring to Reality The Dream of Nguyen Du to Liberate the Oppressed People, by Ha Huy Giap, 11 pp. VIETNAMESE, per, Hoc Tap, No 11, Nov 1965, pp 19-24 JPRS 33317

The Cochinchinese Revolt and Its Lessons, by Hong Chuong, 16 pp. VIETNAMESE, per, Hoc Tap, No 11, Nov 1965, pp 34-48 JPRS 33317

The "Three Builds, Three Antis" Movement, by Nguyen Van Thao, 13 pp. VIETNAMESE, per, Hoc Tap, No 11, Nov 1965, pp 49-54 JPRS 33317

Vinh Linh is Eternally Grateful to the Party, by Ho Si Than, 12 pp. VIETNAMESE, per, Hoc Tap, No 11, Nov 1965, pp 63-67, 75 JPRS 33317

The Heroic City of Vinh Continues to Fight and to Win, by Nhu Hai, 9 pp. VIETNAMESE, per, Hoc Tap, No 11, Nov 1965, pp 68-71, 79 JPRS 33317

Far East
Political (Contd)

The Great Success of the Soviet People in Building Socialism and Communism, by Nguyen Binh, 6 pp.
VIETNAMESE, per, Hoc Tap, No 11, Nov 1965, pp 72-75
JPRS 33317

Cabot Lodge's "Extensive Social Reform Program" Cannot Save the US from being Defeated in South Vietnam, by Duong Thi, 5 pp.
VIETNAMESE, per, Hoc Tap, No 11, Nov 1965, pp 76-79
JPRS 33317

Hanoi Block 30 of Dong Da District Pushes Alertness, by Tran Sam, 8 pp.
VIETNAMESE, np, Nhan Dan, 18 Oct 1965, p. 3.
JPRS 33006

Strengthen Leadership in "Four Good" Movement, by Le Duc Tho, 15 pp.
VIETNAMESE, np, Nhan Dan, 31 Oct 1965, pp. 2-3.
JPRS 33147

Building "Four-Good" Sections and Bases in the Mountain Regions, by Vu Oanh, 7 pp.
VIETNAMESE, np, Nhan Dan, 4 Nov 1965, p. 2.
JPRS 33147

Resolutely Train for Battlefield Victory, by Vuong Thua Vu, 13 pp.
VIETNAMESE, np, Quan-doi Nhan-dan, No 1638, 5 Oct 1965, p. 2.
JPRS 32963

Delegation of Vietnamese Lao Dong Party Visits France, by Nguyen Thanh Le, 5 pp.
VIETNAMESE, np, Thong Nhat, 22 Oct 1965, pp 4 & 3
JPRS 33082

Holding Firmly to the Basic Concept of People's Warfare and People's Armed Forces, by Col Le Nam Thang, 8 pp.
VIETNAMESE, np, Thudo Hanoi, 13 Oct 1965, p 1 & 3
JPRS 33297

Far East
Political (Contd)

Vo Nguyen Giap on Understanding the Party's Military Policies, 58 pp.
VIETNAMESE, per, Tuyen Huan, No 10, Oct 1965, pp. 17-45.
JPRS 33100

On Highway No. One in Military Zone Four, by Le Dinh Du, 8 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 11 & 12 Oct 1965, p 2
JPRS 32915

Military

Commission C of the IPRER Visits Defense and Weapons Projects, by Thaurin Sarin, 8 pp.
INDONESIAN, np, Angkatan Bersendjata, 18 Sep 1965, p 3; 20 Sep 1965, p 3; 21 Sep 1965, p 3.
JPRS 32651

The Gestapu Was a Threat to the Pantjasila, 6 pp.
INDONESIAN, np, Angkatan Bersendjata, 15 Oct 1965, p. 1.
JPRS 33028

Army Officer School Positively Modernizes Training Organization, by Col Le Tu Dong, 5 pp.
VIETNAMESE, np, Quan doi Nhan Dan, No 1635, 1 Oct 1965, p. 2.
JPRS 32963

Grasp Basic Principles of People's War, by Col Le Nam Thang, 8 pp.
VIETNAMESE, np, Thu Do Hanoi, 13 Oct 1965, pp 1 & 3
JPRS 33082

Far East
Geographic

Ever Onward - Never Retreat! The Story of the Climbing of Mt. Sukarno, 176 pp.
INDONESIAN, rpt Publis by Indonesian Army Supreme Command of Operation, 1965, pp 140-225.
DIA LN 48-65

Geographical Index of Thailand, 227 pp.
THAI, bk, Geographical Index of Thailand, Bangkok, 1963, pp 1-341
JPRS 33060

Improve Cooperative Management in the Mountain Regions, 9 pp.
VIETNAMESE, rp, Nhan Dan, 7 Oct 1965, pp 1 and 2.
JPRS 32656

Sociological

Criminal Legislation on Protection of Socialist Property in the Mongolian People's Republic, by R. Gunzen, 12 pp.
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo No 7, 1965, pp 121-125.
JPRS 32,563

What Are The Harms Done by Superstition? 8 pp.
CHINESE, bk, T'an-t'an P'o-ch'u Mi-hsin, Peiping, 1965, pp 42-50
JPRS 32799

Give a Good Performance of the Work of Smashing Superstition, 7 pp.
CHINESE, bk, T'an-t'an P'o-ch'u Mi-hsin, Peiping, 1965, pp 61-69
JPRS 32799

A trip through Harbin, Changchun, and Mukden (II) by Shimada Masao, 9 pp.
JAPANESE, per, Jinmin Chugoku, No 10, 5 Oct 1965, pp. 74-77.
JPRS 33140

Far East
Sociological (Contd)

Guidance and Control of Socialist Economy and the Mass Line, by Kim Tok-chin, 19 pp.
KOREAN, per, Kulloja, No 17, 1965, 5 Sept 1965, pp. 2-13.
JPRS 33041

Several Current Problems in the Execution of the Socialistic Principle of Distribution, by Hong Chong-gol, 12 pp.
KOREAN, per, Kulloja, No 17, 5 Sept 1965, pp. 14-20.
JPRS 33041

The Nation's Housekeeping and Class Indoc-trination of the Workers, by Hwang Song-ch'ol, 9 pp.
KOREAN, per, Kulloja, No 17, 1965, 5 Sept 1965, pp. 21-26.
JPRS 33041

The Brilliant Embodiment of Our Party Policy For The Improvement of the Living Standards of the People, by Chong Hyong-nam, 16 pp.
KOREAN, per, Kulloja, No 18, 20 Sep 1965, pp 10-20
JPRS 33072

The Setup of Incomplete Secondary Schools, by O. Sengge, 6 pp.
MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asundal, No 4, Aug 1965, pp. 50-54.
JPRS 32951

The Task of Education in the New Situation Must be Fulfilled, by Nguyen Khanh Toan, 12 pp.
VIETNAMESE, per, Hoa Tap, No 11, Nov 1965, pp 24-31
JPRS 33317

A Few Lessons About the Building and Development of the Public Health Branch, by Pham Ngoc Thach, 11 pp.
VIETNAMESE, per, Hoa Tap, No 11, Nov 1965, pp 32-38
JPRS 33317

Twenty Years of Vietnam Medicine Under the Democratic Republic, by Pham Ngoc Thach, 10 pp.
VIETNAMESE, per, X hoc Thuoc hanh, No 123, Sep 1965, pp 2-5
JPRS 33297

Far East
Sociological (Contd)

Projected Statutes of the Association of Vietnamese Historians, 5 pp.
VIETNAMESE, per, Nghien cuu Lich su, No 79, Oct 1965, pp. 63-64.
JPRS 33006

Experiences of the Three Responsibilities Movement in Hai Duong, by Tran Minh Tan, 5 pp.
VIETNAMESE, np, Nhan Dan, 23 Oct 1965, p 3
JPRS 33082

Establishing "Four Good" Departments, by Vu Oanh, 8 pp.
VIETNAMESE, np, Nhan dan, No 4229, 2 Nov 1965, p. 2.
JPRS 33100

Promote the Revolutionary Capacity of the Women Workers and Employes, by Truong Thi My, 5 pp.
VIETNAMESE, np, Nhan Dan, 4 Nov 1965, p. 3.
JPRS 33147

Allotment, Planting and Harvest, by Le Van Thuan, 5 pp.
VIETNAMESE, per, Tao San Duoc Hoc, No 9, 1965, pp 5 & 6
JPRS 33082

A Conference Summarizing 1964 Activities of Institute of Agricultural Science, 6 pp.
VIETNAMESE, per, Tin Tuc Hoat dong Khoa hoc, Apr 1965, pp. 48-49.
JPRS 32963

Leadership Experience of Quang Binh Women's Association, by Ha Thi Tinh, 6 pp.
VIETNAMESE, np, Phu Nu Viet-Nam, 20 Oct 1965, p 6
JPRS 33082

LATIN AMERICA

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Artificial Insemination in Cuba, by Talia Carol, 7 pp.
SPANISH, per, Bohemia, 6 Aug 1965, pp 6-11
JPRS 33105

Citrus Crops in Cuba, by Mario G. del Cuzto, 8 pp.
SPANISH, per, Bohemia, 20 Aug 1965, pp 38-43
JPRS 33105

Food Production in the Light of the August Small Landholders' Conference, 9 pp.
SPANISH, per, Cuba Socialista, Oct 1965, pp 124-132
JPRS 32796

Organize the Inventors' and Innovators' Movement, 6 pp.
SPANISH, per, Cuba Socialista, Oct 1965, pp 133-138
JPRS 32796

An Original Approach to Economic Development in Cuba, 7 pp.
SPANISH, per, PEL (Panorama Economico Latinoamericano) Vol 6, No 162, 1965, pp. 8-11.
JPRS 33157

Development of the Dairy Industry of Cuba, 10 pp.
SPANISH, per, PEL (Panorama Economico Latinoamericano) Vol 6, No 164, pp. 13-19.
JPRS 33157

INRA Celebrates Third Anniversary, 7 pp.
SPANISH, np, Sierra Maestra, 10 Aug 1965, pp. 1, 3 and 4.
JPRS 33083

Latin America
Political

Comparison of the Capitalist and the Communist
Concept of Freedom, by Blas Roca, 16 pp.
SPANISH, per, Cuba Socialista, Oct 1965, pp 18-37
JPRS 32796

Castro Comments on Local Government, by
Fidel Castro, 22 pp.
SPANISH, per, Cuba Socialista, Nov 1965,
pp 13-42
JPRS 33105

Speech by Fidel Castro on Behalf of the
Central Committee of the Communist Party of
Cuba, by Fidel Castro, 18 pp.
SPANISH, per, Cuba Socialista, Nov 1965,
pp 61-82
JPRS 33105

Speeches from Communist Party Central Committee
Meeting, 6 pp.
SPANISH, np, Cuba Socialista, Nov 1965,
pp. 53-60, 119-124.
JPRS 33083

First Conference of Solidarity of the Peoples
of Africa, Asia and Latin America, 5 pp.
SPANISH, per, Cuba Socialista, Nov 1965,
pp. 119-124.
JPRS 33083

Uruguay Socialist Organ Presents Thesis on
National and International Policy, 20 pp.
SPANISH, np, El Sol, 1 Oct 1965, pp 4-5,7
and 8; 8 Oct 1965, pp 4-5,7, and 2.
JPRS 32673

Cuba Must Build Communism As It Builds
Socialism, by Castro, 9 pp.
SPANISH, np, Granma, 24 Oct 1965, pp. 2-6.
JPRS 33019

Armando Hart's Report on Party Organization,
11 pp.
SPANISH, np, Granma, 24 Oct 1965, pp. 7-11.
JPRS 33019

Castro on the Selection of Members of the Party
Central Committee and on the Party, by Fidel
Castro, 9 pp.
SPANISH, np, Granma, 24 Oct 1965, pp. 12-14.
JPRS 33019

Latin America
Political (Contd)

Speech by Vilma Espin, President of the FMC,
At Meeting of International Women's Federa-
tion in Salsburg, 6 pp.
SPANISH, np, Sierra Maestra, Vol VII,
No 224, 30 Oct 1965, p 3
JPRS 33255

Establishment of the United Party of the
Socialist Revolution in Occidente Army, 8 pp.
SPANISH, per, Verde Olivo, 3 Oct 1965,
pp. 4-8.
JPRS 32873

Party Activities at Matanzas Basic Officers
School, 7 pp.
SPANISH, per, Verde Olivo, 3 Oct 1965, pp.
54-57.
JPRS 32873

Secretary General of UJC Discusses Labor Plan,
6 pp.
SPANISH, per, Verde Olivo, No 42, 24 Oct 1965,
pp. 4-7.
JPRS 32889

Military

The Venezuelan Navy,
SPANISH, rpt, Marina de Guerra de Venezuela,
DIA LN 239-65
ID 5902003465

Pamphlet Explaining the Admission of
Candidates - (Military College-Paraguay)
26 pp.
SPANISH, rpt, Published by Marshal
Francisco Solano Lopez Military College.
1965.
DIA LN 13-65

Survival in the Jungle, by E. D. Thero, 19 pp.
SPANISH, bk, Manual de Supervivencia en
La Selva, Lima, Peru, 1963, pp 13-14; 107-125.
ACSI I-7743
ID 2876009064

Latin America
Military (Contd)

The New System of Communications of
the Argentine Republic, 17 pp.
SPANISH, per, Revista de Comunicacions,
295-296, Mar-Apr 1962, pp 3-22.
DIA LN 89-65

Direction and Administration of the
Military Medical Corps, by Miguel
Angel Arcos, 7 pp.
SPANISH, per, Revista de las Fuerzas
Armadas, Mar-Apr 1965, pp 123-126.
DIA LN 78-65

Sociological

The Boarding School in El Jigue, by Ruben
Castillo Ramos, 5 pp.
SPANISH, per, Bohemia, 6 Aug 1965, pp 16,17
& 18
JPRS 33105

New Urban District in Santiago De Cuba Will
House 50,000, by Rafael Sanchez Lalebret, 8pp.
SPANISH, per, Bohemia, 10 Aug 1965,
pp 105-109
JPRS 33105

School Facilities in San Lorenzo, by Rogelio
Luis Bravet, 7 pp.
SPANISH, per, Bohemia, 21 Aug 1965, pp 34-39
JPRS 33105

On the Dialogue Between Spanish Catholics and
Communists, by Monsig. Jose Guerra Campos, 5 pp.
SPANISH, per, Espana Republicana, Vol XXVII,
No 599, 15 Oct 65, pp 3-7.
JPRS 32899

Rio Encuentro, Argentine Territory,
by Amaro Berrondo.
SPANISH, per, Manual de Informaciones, No 5/6
Vol VI, 1964, pp 2-20.
DIA LN 262-65
ID 2804005565

SCIENTIFIC

Aerospace

Conference on the Application of Mathematical Methods in Aerospace Medicine, 25-26 Feb 1965, 30 pp.
RUSSIAN, rpt, 1965
JPRS 32808

Problems in Evaluating the Performance of Astronauts, by F. Y. Isakov, and V. A. Popov, 7 pp.
RUSSIAN, rpt, presented at the 16th International Astronautical Congress, Athens, Sep 1965, pub in Moscow, 1965
JPRS 32808

Results of Some Electrophysiological Studies on "Voskhod" Spacecraft, by I. T. Akulinichev, and V. V. Bogdanov, 18 pp.
RUSSIAN, rpt, 13-18 Sep 1965,
JPRS 32808

Brightness Variations of Echo-1 Satellite, by M. V. Bratiychuk.
RUSSIAN, per, Akad. Nauk SSSR, Byul. Stantsii Opticheskogo Nablyudeniya Iskusstvennykh Sputnikh Zemli, No 36, 1963, pp 23-29.
*NASA TT F-9841

Equipment and Methods of Measurements During Tests of Rockets, by A. V. Kantor, 689 pp.
RUSSIAN, bk, Apparatura i Metody Izmereniy Pri Ispytaniyakh Raket, Moscow, 1963, pp 1-520. 9698541-V
FTD-MT-64-199

Measurement of Protons of Energy 0.4 to 8 Mev on the Satellite Kosmos-41, by S. N. Vernov.
RUSSIAN, per, Geomagnet i Aero, Vol V, No 4, 1965, pp 645-648.
*Dept of Navy/APL No J-693

Resource Increased in Double, by M. Gal'perin, G. Ushakov, 8 pp.
RUSSIAN, per, Grazhdanskaya Aviatsiya, No 8, 1964, pp 28-29. 9698362
FTD-TT-65-723

Scientific Aerospace (Contd)

The Silvery Cigars (Dirigibles) Are Being Prepared for Operation, by Yu. Dmitriyev, 10 pp.
RUSSIAN, per, Nauchno-Tekhnich Eskiye Obshchestva, No 4, 1965, pp 43-45.
9695611
FTD-TT-65-744

Principles of Rocket Flight Theory, by A. A. Dmitriyevskiy, et al.
RUSSIAN, bk, Osnovy Teorii Poleta Raket, 1964, pp 1-310.
*FTD-MT-65-567

On the Equilibrium and Tension of a Flexible Thread Under the Effect of Outer Forces, Depending Upon the Direction of the Thread in Space, by N. I. Alekseyev, 5 pp.
RUSSIAN, per, Prik Matemat i Mekh, Vol XXVIII, No 5, 1964, pp 949-951.
9698197
FTD-TT-65-676

Communications Satellites, by Prof. A. Fortushenko, 7 pp.
RUSSIAN, per, Radio, No 7, Jul 1965, pp. 7-9.
JPRS 32546

Man and Outer Space, by V. Tomakov, 7 pp.
RUSSIAN, per, Sovetskiy Krasnyy Krest, No 1, 1960, pp 12-13. 9698236
FTD-TT-65-602

A Problem of Optimum Motion of Ballistic Rockets, by A. S. Galiullin.
RUSSIAN, per, Trudy. Moscow. Universitet Druzhby Narodov, Vol 1, No 1, 1963, pp 68-70.
*FTD-TT-65-1918

Investigation of a Connected Automatic Flight Control System by the Methods of the Theory of Invariance, by L. A. Piontkovskiy.
RUSSIAN, per, Trudy Soveshchaniya Vsesoyuznoye Soveshchaniye po Teorii Invariantnosti i Yeye Primeneniyu v Avtomaticheskikh Sistemakh, 2D, Kiev 1962, Teoriya Invariantnosti v Sistemakh Avtomaticheskogo Upravleniya, 1964, pp 270-282.
*FTD-TT-65-1962

Scientific
Aerospace (Contd)

Application of the Theory of Invariance to the Selection of the Parameters of a Flight Control System, by V. A. Bodner. RUSSIAN, rpt, Vsesoyuznoye Soveshchaniye po Teorii Invariantnosti i Yeye Primeneniya v Avtomaticheskikh Sistemakh, No 2, 1962, pp 403-411. *FTD-TT-65-1968

Aerodynamic Experimentation in Aviation, by Liu, Mou-Chi. CHINESE, PER, Hang K'ung Chih Shih, No 4, 1964, pp 28-30. *FTD TT-65-1824

Guided Missile Warheads and Fuses, by Li Ch'u-fei, 5 pp. CHINESE, per, Hang-k'ung Chih-shih, Vol II, No 8, 7 Aug 1965, pp 12-13 JPRS 33099

The Next Step in Space Travel, by Tsien Shing Wu, 9 pp. CHINESE, per, Hua Hsueh T'ung Pao, No 2, 1963, pp 14-16. 9698635 FTD-TT-65-562

Supersonic Flying Machine, by O. Reitlinger. FRENCH, Patent No 945,470, 1947, 7 pp. *Dept of Navy/APL No J-688

German Institute for Aeronautical and Space Research, by E. Berger, P. Freymuth, et al, 42 pp. GERMAN, rpt, Deutsche Versuchsanstalt fur Luft und Raumfahrt E.V., pp 1-31. Dept of Navy Tr 4330/ONI 2006

The Devaluated Vertical Take-off Aircraft, 56 pp. GERMAN, per, Luftfahrttechnik Raumfahrttechnik, No 12, 1963. Dept of Navy Tr 4329/ONI 2005 D

Twin Formation in Lamellar Pearlite, by M. Proger. GERMAN, per, Die Naturwissenschaften, Vol LII, (3), 57, 1965. 9230417 AEC-NP-Tr-1306

Scientific
Aerospace (Contd)

The First Space Expedition, by I. Pascaru, 9 pp. RUMANIAN, per, Stiinta si Technica, No 11, 1964, pp 26-28. 9698636 FTD-TT-65-687

Optimum Control of Climb of Vtol (Vertical Take-Off and Landing) Aircraft With Mobile Thrust Axis, by T. Hacker, 10 pp. RUMANIAN, per, Studii si Cercetari de Mecanica Aplicata, Vol XV, No 2, 1964, pp 433-440. 9698632 FTD-TT-65-682

Agriculture

The First All-Union Conference on Toponymics Inter-Vuz Conference on Geobotanical Zoning of USSR, Conference on the Geography of the Fertility of Forest Trees, Brushwoods and Berry Bushes, by Ye. M. Pospelov, L. N. Sobolev. 12 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Ser Geographicheskaya, No 3, 1965, pp 142-144. ACS1 T-7843-C ID 2204037265

Brief Description of the Principal Varieties of Strong and Durum Wheat, 15 pp. RUSSIAN, bklet, Rekomendatsii po proizvodstvu zerna sil'nykh i tverdykh pshenits, 1964, pp. 33-47. JPRS 33014

From the Plant to the Consumer, by A. Yezhevskiy, 5 pp. RUSSIAN, per, Bel'skaya Zhizn', 12 Sept 1965, p. 3. JPRS 32541

Scientific
Agriculture (Contd)

Harvesting Machines Propelling Agents, by S. Burakova and V. Vorinin, 6 pp.
RUSSIAN, per, Sel'skokhozyaystvennoye Proizvodstvo Sibiri i Dal'nego Vostoka, No 5, May 1965, pp. 42-43.
JPRS 32521

Quantity and Quality of Water for Agriculture, by Michal Antonic, Ladislav Cervenka, CZECH, bk, Zdroje a Kvalita vody v Polnohospodarstve, 1963, Bratislava, pp 168-300.
DIA LN-88-65
ID 2218061465-V

Food Preservation by Irradiation, I. Evolution and Present Status in the World, by M. Del Van Cob, N. Sune, Ortin. SPANISH, rpt, Conservacion de Alimentos por Irradiacion. I. Evolucion y Estado Actual en el Mundo, Madrid, 1965, 63 p.
*AEC

Biological & Medical Sciences

The Recognition of Speech Sounds with the Help of Self-Organizing Systems with Two Positive Feedbacks, by H. L. Otkhmezuri. RUSSIAN, per, Avtomatika, Vol IX, No 2, 1964, pp 59-69.
*FTD-TT-65-1851

Electronic Microscope Research on Bacteria and Phages, by A. P. Pekhov. RUSSIAN, bk, Elektronnomikroskopicheskoye Issledovaniye Bakteriy i Fagov, 1962, pp 1-224.
*FTD-TT-65-1922

Electroencephalographic Changes in the Orientation and Conditioned Defense Reflexes Under the Effect of Tranquillizers, by Yu. V. Burov, 7 pp.
RUSSIAN, per, Farmakologiya i Toksikologiya, Vol XXVIII, No 4, 1965, pp 389-393.
JPRS 32,810

Scientific
Biological & Medical Sciences (Contd)

Effect of Hypoxemia and Hypercapnia on Intraocular Pressure and Tonus of Intraocular Vessels, by S. Ya. Sazonov, 13 pp.
RUSSIAN, per, Fiziologicheskiy zhurnal SSSR, Vol 51, No 9, Sept 1965, pp. 1057-1065.
JPRS 32847

Hematology and Blood Transfusion, by S. S. Lavrik, et al. 57pp.
RUSSIAN, bk, Gematologiya i Perelivanie Krovi, Vol I, Kiev, 1965, 1-98, 132-137, 143-145, 146-149, 150-153, 154-155, 156-160, 161-163, 164-168, 169-172 and 248-250.
JPRS 32,883

Concerning the Maximum Permissible Concentrations of Uranium in Water and Air, by V. P. Shamov.
RUSSIAN, per, Gigi i Sani, No 11, 1964, pp 104-111. 9230540
AEC-TR-6624

Effect of Industrial Working Conditions Upon Workers, by R. D. Gabovich, 17 pp.
RUSSIAN, bk, Gigiyena, Moscow, 1965, pp 231-241 & 317-320
JPRS 32981

Data on Neurohumoral Shifts Occurring under the Effect of Chloroprene, by Ye. I. Gasparyan, 9 pp.
RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabolevaniya, No 6, 1965, pp. 19-24.
JPRS 33038

Data Substantiating Maximum Permissible Concentrations of Some Insoluble Molybdenum Compounds, by O. Ya. Mogilevskaya, 8 pp.
RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabolevaniya, No 6, 1965, pp. 40-44.
JPRS 33038

On the Toxicity of Gallium Compounds, by V. V. Podosinovskiy, 7 pp.
RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabolevaniya, No 6, 1965, pp. 45-48.
JPRS 33038

Scientific
Biological & Medical Sciences (Contd)

Investigating the Phenomenon of Sleep,
by A. Shepov'nikov, 5 pp.
RUSSIAN, np, Izvestiya, 29 Oct 1965, p. 6.
JPRS 33033

Results of Biological Research in 1964 and
Plans for the Future, by V. G. Kocherezhkin,
22 pp.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR,
Seriya Biologicheskaya, No 3, May/Jun 1965,
pp. 448-458.
JPRS 33007

The Annual Meeting of the Department of
General Biology, by A. A. Buyanovskaya, 10
pp.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR,
Seriya Biologicheskaya, No 3, May/Jun 1965,
pp. 458-463.
JPRS 33007

Biological Research Institutes, by M. Kh.
Chaylakhyan, 7 pp.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR -
Seriya Biologicheskaya, No 3, May-Jun 1965,
pp. 467-470.
JPRS 33162

Certain Physiological Reactions of Man
under Conditions of Brief Weightlessness,
by I. I. Kas'yan, A. S. Krasovskiy, I. A.
Kolosov, M. A. Lomova, V. I. Lebedev and
B. N. Yurov, 22 pp.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR,
Seriya Biologicheskaya, No 5, Sept/Oct 1965,
pp. 633-646.
JPRS 33115

Anniversary of I. S. Shchukin, Anniversary
of K. K. Markov, by Yu. G. Simonov,
A. A. Velichko, et al. 5 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser
Geograficheskaya, 1965, No 3, pp 136-138.
ACSI Y-78438
ID 2204037265

Chemistry and Medicine, by A. G. Natradze, 49 pp.
RUSSIAN, bk., Khimiya i meditsina, Moscow, 1965
JPRS 32795

Scientific
Biological & Medical Sciences (Contd)

Autonomic Dystonias in Radiation Injuries
and Their Treatment, by I. S. Glasunov, A.
A. Grafov and V. A. Ivanov, 8 pp.
RUSSIAN, per, Klinicheskaya Meditsina,
Vol 43, No 8, Aug 1965, pp. 14-18.
JPRS 33039

Biochemical Blood Indexes in Sheep With
Radiation Disease, by V. A. Sirotkin.
RUSSIAN, rpt, Materialy XI - oi
(Odinnadtsatoi) Nauchn. Konf. Leningr.
Vet Inst. Leningrad, Sb 1962, pp 84-97.
*FTD-TT-65-1817

On Some Principles of Machine Diagnosis, by
M. I. Anokhin, 6 pp.
RUSSIAN, bk, Metodologicheskiye Problemy
Dagnostiki - Trudy 1-go Moskovskogo Ordona
Lenina Meditsinskogo Instituta imeni I. M.
Sechenova, Vol XXXVII, 1965, pp. 185-191.
JPRS 33161

Change in Activity of the Taste Analyzer
under Experimental Gastritis in Dogs,
by N. A. Zubkova.
RUSSIAN, bk, Nauchnaya Svoosheneya Instituta
IM I. P. Pavlova, 1959.
*FTD-TT-65-1870

Old and New Dogmas of Soviet Biology, by
G. Platonov, 26 pp.
RUSSIAN, per, Oktabr', No 5, Aug 1965,
pp 149-162
JPRS 32993

Atomic Absorption Centers and Luminescence
Phenomena in Heavy-Element Activated Alkali-Halide
Phosphors, and Their Preparation Under the
Influence of Band Radiation, by M. L. Kats, 10 pp.
RUSSIAN, per, Optika i Spektroskopiya, Vol III,
No 6, 1957, pp 602-609, 9230474.
AEC IS-trans-18

Review of Compendium "Influence of
Ionizing Radiation on the Functioning
of the Higher Sections of the Central
Nervous System of Offspring", by
N. L. Livshits, 6 pp.
RUSSIAN, per, Patologicheskaya Fiziologiya
i Eksperimental'naya Terapiya, No 3,
1963, pp 90-91. 9698638
FTD-TT-65-860

Scientific
Biological & Medical Sciences (Contd)

Molecular Basis of Memory, by V. L. Ryshkov, 15 pp.
RUSSIAN, per, PRIRODA, No 7, 1965, pp 2-10.
JPRS 32,809

Simulating Certain Properties of the Memory, by E. T. Golovan', 11 pp.
RUSSIAN, per, Priroda, No 9, 1965, pp 45-50
JPRS 33298

Problems of Evolutionary and Technical Biochemistry, by A. N. Bakha.
RUSSIAN, bk, Problemy Evolyutsionnoy i Tekhnicheskoy Biokhimi, Moscow, 1964.
*FTD-TT-65-1869

Tissue Cultures in Virology, by V. D. Solov'ev, T. A. Bektemirov.
RUSSIAN, rpt Tkanevye Kul'tury v virusologii 198 p. 1963.
ACSI I-4526
ID 5831037663-V

A Complex Method of Study of the Functioning of the Taste Analyser in Man, by A. I. Vasilyev.
RUSSIAN, per, Trudy Ak Nauk SSSR. Institut Fiziologii, No 6, 1957, p 172.
*FTD-TT-65-1915

Biological and Hydrodynamical Sounds Emitted by Fishes, by A. K. Tokarev.
RUSSIAN, per, Trudy VNIRO, Vol XXXVI, 1959, pp 272-279.
*Dept of Navy/Oceanographic Tr 254

The Problem of Autoregulation in Cytology. III. Reactive Increase of Cellular Resistance to the Action of Injurious Agents (Adaptation), by V. Ya. Aleksandrov, 35 pp.
RUSSIAN, per, Tsitologiya, Vol VII, No 4, Jul/Aug 1965, pp 447-466.
JPRS 32904

Cytochemical and Luminescent Microscopic Studies of Nerve Cells in Tissue Culture, by A. M. Aref'yeva and A. V. Gorkina, 9 pp.
RUSSIAN, per, Tsitologiya, Vol VII, No 4, Jul/Aug 1965, pp 451-457.
JPRS 32904

Scientific
Biological & Medical Sciences (Contd)

Cortical Bioelectric Pattern of Activity in Epileptic Patients and Response to Mesamidine and Benzonal, by F. A. Leybovich.
RUSSIAN, per, Akad Meditsinskikh Nauk SSSR, Vestnik, No 1, 1962, pp 65-77.
*FTD-TT-65-1927

Effect of Vestibular Irritation of Electrical Activity of the Cortex and Basal Areas of the Brain, by Ye. A. Zhirmanskaya, F. M. Ioselevich, 21 pp
RUSSIAN, per, Vestnik Oto-Rino-Laringologii, Vol XIII, No 2, 1951, pp 17-24. 9698223
FTD-TT-65-410

Immunobiological Properties of Foot-and-Mouth Disease Virus of Type Asia-1, by I. A. Rostovtseva, P. M. Darda, 6 pp.
RUSSIAN, per, Veterinariya, No 9, Sep 1965, pp 15-17
JPRS 32980

Pressing Problems of Present-Day Biology, 25 pp.
RUSSIAN, per, Voprosy Filosofii, No 7, 1965, pp 42-55
JPRS 32979

Primary Genetic Information and the Problems of Bionics, by N. N. Zhukov-Vereshnikov, et al, 9 pp.
RUSSIAN, per, Voprosy Filosofii, No 7, 1965, pp 56-63
JPRS 32979

The Subject Matter of Semiotics, by A. A. Vetrov, 16 pp.
RUSSIAN, per, Voprosy Filosofii, No 9, 1965, pp. 57-67.
JPRS 32876

Living Organisms and the Anti-Entropy Effect of Information, by A. I. Rykhovskiy, 19 pp.
RUSSIAN, per, Voprosy Filosofii, No 9, 1965, pp. 118-123.
JPRS 32876

Can Living Matter be Created Artificially? by K. S. Trinchin, 10 pp.
RUSSIAN, per, Voprosy filosofii, No 9, 1965, pp. 124-131.
JPRS 32876

Scientific
Biological & Medical Sciences (Contd)

On the Problem of Hypnopedias, by
N. D. Zavalova, V. P. Zukhar', 9 pp.
RUSSIAN, per, Voprosy Psikhologii,
No 2, 1964, pp 98-102. 9698639
FTD-TT-65-783

Course of Experimental Infection in Sheep
Infected with Strains of Tick-Borne
Encephalitis Virus Isolated in Different
Geographic Zones of the USSR, by V. I.
Votyakov, I. I. Protas, 14 pp.
RUSSIAN, per, Voprosy Virusologii, Vol I,
No 4, Jul-Aug 1965, pp 454-462
JPRS 32992

Classification of Infectious Diseases, by
M. P. Kozlov, 7 pp.
RUSSIAN, per, Zhurnal Mikrobiologii, Epidemi-
ologii i Immunobiologii, No 9, 1965, pp. 129-
134.
JPRS 33114

Electric Responses of Various Structures of
the Cerebral Cortex in the Formation of the
Conditioned Food Reflexes to Auditory and
Photic Stimuli, by N. N. Lyubimov, 13 pp.
RUSSIAN, per, Zhurnal Vysshey Nervoy Dey-
atel'nosti imeni I. P. Pavlova, Vol XV, No 4,
1965, pp. 585-593.
JPRS 33021

Dynamics and Readjustment of the Motor
Response of Animals to Various Hypoxic
Media, by I. S. Breslav, 8 pp.
RUSSIAN, per, Zhurnal Vysshey Nervoy Dey-
atel'nosti imeni I. P. Pavlova, Vol XV, No
4, 1965, pp. 677-682.
JPRS 33021

Notes on Genetics, by A. Sharov, 23 pp
RUSSIAN, per, Znaniya, Vol XXXIV, No 4,
Apr 1965, pp 155-173.
JPRS 32,678

Two Components of the Scotopic b-Wave
of the Human Electroretinogram, by
Liu Yu-min, Yang Chen-yu, 17 pp.
CHINESE, per, Sheng Li Hsueh Pao,
Vol XXVI, No 2, 1964, pp 130-139.
9698633
FTD-TT-65-564

Scientific
Biological & Medical Sciences (Contd)

A Discussion of the Role of Genetics and
Biology in Light of the Changes Occurring
in the Soviet Union, 8 pp.
BULGARIAN, in, Literaturn Front, No 36,
2 Sep 1965, pp 1, 2
JPRS 32924

Rural Medical Knowledge: Introduction to
Practical Rural Medicinals, by Yeh Chu-ch'uan
(5509 2904 3123), 39 pp.
CHINESE, per, Chiang-su Chung-i, No 5, 15 May
1964, pp. 23-25; No 6, 15 Jun 1964, pp. 30-32;
No 8, 15 Aug 1964, pp. 25-27; No 9, 15 Sept
1964, pp. 34-36; and No 10, 15 Oct 1964, pp.
24-25, 40.
JPRS 33135

The Development of Cybernetics, by Hu
Shih-hua, 16 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 10,
Oct 1965, pp 862-869
JPRS 32985

Comparison of the Radiation Sensitivity
of Chromosome in White Blood Cells of
Human Beings, Monkeys, and Rabbits, by
Wang An-chu, Chou Hsien-ting, 5 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 10,
Oct 1965, pp 917-918
JPRS 32985

Cyanogen-Containing Plants, by P'an Cheng-
chu (3382 2973 0443), 9 pp.
CHINESE, per, Sheng-wu-hsueh T'ung-pao,
No 5, Sept 1965, pp. 12-15.
JPRS 32960

Collected Papers of the First National Symposium
of Biochemistry, 238 pp.
CHINESE, report, Ti-i-tz'u Ch'uan-huo Sheng-wu
Hua-hsueh Hsueh-shu-hui Hui-k'an, 1962, preface
and pp. 1-84, 95-162.
JPRS 33002

Radiation Protection, 22 pp.
CHINESE, bk, Yuan-tzu-neng Ti Yuan-li Ho Ying-
yung, Jul 1965, pp. 294-318.
JPRS 33152

Scientific
Biological & Medical Sciences (Contd)

Salmonella Infections in Dogs, by Kunstyr.
CZECH, per, Ceskoslovenska Epidemiologie,
Mikrobiologie, Immunologie, No 11, 1962,
pp 157-159.

*FTD-TT-65-1820

Biological Activity of Petroleum Products,
by M. Cevka, 11 pp.
CZECH, per, Ropa A. Uhlie, No 1, 1965, pp 14-17.
ACSI I-7778
ID 220403765

The Perception of Taste of Phenylthiourea
(PTC), by R. Brdicka.
CZECH, per, Sbornik Lekarsky,
Vol LXVI, No 4, 1964, pp 116-120.
*FTD-TT-65-1863

Factors Determining the Shape of Cells in
Mammals, by George Teissier.
FRENCH, per, Comptes Rendus des Seances et
Memoires de la Societe de Biologie et de
ses Filiales, Vol CXXXV, 1941, pp 1309-1312.
9230598
AEC-UCRL-Tr-1240-L

Safety Standards, by M. Dousset, 22 pp.
FRENCH, per, Maroc-Medical, Vol XLIII,
Feb 1964, pp 147-155. 9230452
AEC-SC-T-65-751

Medical Care. Annual Report of the SGHP,
by F. Estrade.
FRENCH, rpt, Medecine de Soins. Rapport Annuel
SGHP, Madagascar, 1963.
DIA LN 22-65
ID 1860005265

Report on the Activities of the
Pasteur Institute of Madagascar in
1962, 95 pp.
FRENCH, rpt, Rapport sur le Fonctionnement
de l'Institut Pasteur de Madagascar
en 1962, 1963.
DIA LN-20-65
ID 1860005265

On the Question of the Existence of a
Leucylpeptidase.
GERMAN, per, Biochem Zeit, Vol CCCIX,
1957, pp 228-238.
*NASA TT F-9855

Scientific
Biological & Medical Sciences (Contd)

Pharmacology and Clinical Aspects of Synthetic
Poisons, by Kurt Stade, 330 pp.
GERMAN, rpt, Deutscher Militärverlag, Berlin,
1964. Attach to IR 4-317-0139-64
Dept of Navy Tr 4326/ONI 2001

The Treatment of Psychic Illnesses With Vesitan,
by Robert Kroger, 8 pp.
GERMAN, per, Die Medizinische Welt, No 8,
23 Feb 1963, pp 1-15.
ACSI I-7760D
ID 2214006465

A Neuroleptic of Affectively Relaxing
Effect, 8 pp.
GERMAN, rpt, Neuroleptikum mit Affektiv
Auflockernder Wirkung, pp 1-11.
ACSI I-7760A
ID 2214006465

Therapeutic Experience With Thiopropazate
and With a Combination of Thiopropazate and
Chlorphencyclan (Vesitan) In Psychiatry,
by W. Poldinger, 12 pp.
GERMAN, per, Praxis, Vol LI, No 3, pp 73-78.
18 Jan 1962. pp 1-16.
ACSI I-7760B
ID 2214006465

Psychopharmacological Long-Period
Treatments in Clinical Psychiatry,
With Special Reference to Vesitan,
(Thiopropazat + Chlorphencyclan),
by E. Jost, 7 pp.
GERMAN, per, Praxis, Vol LII, No 33,
1015-1018. 15 August 1963, pp 1-11.
ACSI I-7760E
ID 2214006465

Management Problems from the Viewpoint of
Cybernetic, by Karlheinz Kannegiesser, 19
pp.
GERMAN, per, Staat und Recht, Vol 14, No 10,
Oct 1965, pp. 1609-1622.
JPRS 33159

The Control of Social Processes and Cybernetics,
by L. B. Khalperin and P. N. Lebedev, 19 pp.
GERMAN, per, Staat und Recht, Vol 14, No 10,
Oct 1965, pp. 1622-1636.
JPRS 33160

Scientific
Biological & Medical Sciences (Contd)

Comparative Investigations on the Defense Mechanism of Cysteamine and AET for "Intestinal Radiation Death", by Zottan B. Zsebok, et al.
GERMAN, per, Strahlentherapie, Vol 127, No 3, 1965, pp 452-462.
*AEC
EDC 1 Jan 1966

On the Treatment of Schizophrenic Final Stages With Vesitan, by H. Schwarz, H. J. Kruger, 5 pp.
GERMAN, per, Therapie der Geisteskrankheiten, Vol CIII, Aug 1964, pp 1-7 (1924-1930).
ACSI 1-7760F
ID 2214006465

Development and Organization of Indonesia's Health Program, by Soehadi Reksoatmodjo, 75 pp.
GERMAN, rpt, W. Bertelsmann Publishing Co 1963, Bielefeld, Germany.
DIA LN 108-65

Interference Microscopical Investigations of the Growth of Single Cells (HeLa-Cells) in the Tissue Culture, by W. Sandritter, H. G. Schiemer, et al., 38 pp.
GERMAN, per, Zeitschrift fur Pathologie, Vol LXX, 1960, pp 271-299, 9230405.
AEC ANL-trans-219

Twenty Years of Veterinary Parasitology in Hungary, by Dr Sándor Kotlan, 7 pp.
HUNGARIAN, per, Magyar Allatorvosok Lapja, No 7, Jul 1965, pp 280-292
JPRS 32990

Proceedings of the Hungarian Microbiological Society Congress, 5 pp.
HUNGARIAN, per, Orvosi Het'lap, No 41, 21-23 Oct 1965, pp. 1964-1965.
JPRS 33177

Medical Facilities that Guard the Health of Six Hundred Million People, 12 pp.
JAPANESE, per, Jinmin Chugoku, No 10, 5 Oct 1965, pp. 10-15.
JPRS 33152

Clinical Application of Fluorod Dosimetry, by Tatsuo Arai, 50 pp.
JAPANESE, per, Nipp Act Radiol, Vol XXIII, No 6, 1963, pp 753-772, 9230413.
AEC NSJ-tr-25

Scientific
Chemistry

Analysis of the Effect of Replacing Nitrogen by Helium in Air on the Development of Chick Embryos, by V. M. Savin and V. V. Rol'nik, 11 pp.
RUSSIAN, per, Biophizika, Vol IX, No 5, 1964, pp 589-596.
JPRS 32,905

Interaction of Cholinesterase with O-Ethyl-3-Alkylmethylthiophosphinates, by Ye. V. Rozengart, 10 pp.
RUSSIAN, per, Biokhimiya, Vol 30, No 2, 1965, pp. 344-349.
JPRS 32874

Organophosphorus Inhibitors of Cholinesterase, by G. M. Grigor'yeva, 12 pp.
RUSSIAN, per, Biokhimiya, Vol 30, No 2, pp. 415-422.
JPRS 32874

Thermal Investigation of the Reaction in Preparing Phenol-Formaldehyde Resins, by G. B. Ravich, A. F. Frolova, 6 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol XC, 1953, pp 391-394, 9230423.
AEC SC-t-65-745

Investigation of the Radiolysis of Ammonia Adsorbed on Solid Surfaces by the Electron Paramagnetic Resonance Method, by Yu. A. Sorokin, et al.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLIX, No 6, 1964, pp 1385-1388.
NASA TT F-9498

Isotopic Exchange of Oxygen on Silver Films, by G. K. Boreskov.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLXIV, No 3, 1965, pp 606-609.
*NASA TT F-9856

The Action of Phosphorous Acid Esters on α -Chloroperfluoronitrosoalkanes, by A. A. Gevorkyan, B. L. Dyatkin and I. L. Khunyan, 12 pp.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 9, 1965, pp. 1599-1606.
JPRS 33022

Scientific
Chemistry (Contd)

Reduction of Alkaline Earth Oxides
With Aluminum Carbide, by A. S. Bormazyan,
M. V. Darbinyan.
RUSSIAN, per, Iz Ak Nauk Armyan Skoi
SSR Khimi Ches Kie, Vol XV, No 1, 1962,
pp 25-32. 9230468
AEC-ORNL-Tr-683

Mechanism of Oxidation of Some NI-CR
Base Alloys, by D. Ignatov, R. Shamunova.
RUSSIAN, per, Iz OTN Akad Nauk SSSR,
No 3, 1959, pp 83-87.
*FTD-TT-65-1919

Combustion of Ammonium Perchlorate at
Atmospheric Pressure, by A. A. Shidlovskiy,
et al.
RUSSIAN, per, Izv. VUZ SSSR, Khimiya i
Khimicheskaya Tekhnologiya, No 5, 1964,
3 pp.
ACSI I-7722
2204031565

Estimation of Viscosity for Molten
Salts (Oxides), by O. K. Sokolov.
RUSSIAN, per, Izv. VUZ Zavedeniy,
Tsvetnaya Metallurgiya, Vol 5, No 1,
1962, pp 89-93.
*NASA TT F-416

Study by the Extraction Method of the Complexing
of Curium and Europium, by I. Stary, 7 pp.
RUSSIAN, rpt, Joint Institute for Nuclear Research,
Dubna, 9230412.
AEC ORNL-tr-760

Evaluation of the Quality of Spray
Obtained During Ultrasonic Dispersion
of Liquids and Melts, by V. F. Popov.
RUSSIAN, per, Khimicheskaya Promyshlennost',
No 12, 1964, pp 898-901.
*FTD-TT-65-1960

Investigation of the Process of Stretching
of Polyacrylonitrile Fibers by T. Ya. Grishina,
E. A. Pakshver, et al.
RUSSIAN, per, Khimicheskiye Volokna, No 3,
1963, pp 9-11.
*FTD-TT-65-1897

Scientific
Chemistry (Contd)

Modification of Polypropylene Fibers and
Fabrics by Grafting of Acrylonitrile by
Z. Manasek, M. Micko, et al.
RUSSIAN, per, Khimicheskiye Volokna, No 3,
1963, pp 20-24.
*FTD-TT-65-1897

The Affect of Low Temperatures on the
Antifriction Properties of Polycaprolactam,
by Yu. A. Yevdokimov,
A. F. Kotenko, 5 pp.
RUSSIAN, per, Plasticheskiye Massy,
No 9, 1964, pp 41-43. 9698626
FTD-TT-65-909

Growth of Chromium Oxide Single Crystals
by the Verneuil Method, by A. A. Popova,
RUSSIAN, per, Rost Kristallov, Ak Nauk SSSR,
Vol IV, 1964, pp 148-150. 9230420
AEC-SC-T-65-759

Calibration of the VR-5/20 Thermocouple
to Critical Points up to 3000°C.
Determination of the Melting Points of
Vanadium and Niobium of High Purity,
by Yu. A. Kocherzhinskiy, G. F. Kobzenko.
RUSSIAN, per, Sbornik Nauchnykh Rabot
AN UKRSSR Institut Metallofiziki, No 17,
1963, pp 209-210.
*FTD-TT-65-1888

Spectrophotometric Investigation of
Reaction of Niobium and Tantalum With
Salicylhydroxamic Acid, by I. P. Alimarin,
N. P. Borzenkova, 10 pp.
RUSSIAN, per, Vest Mosk Univ, Ser II,
Khim, No 6, 1963, pp 65-69. 9698637
FTD-TT-65-920

Investigation of Thermodynamic Properties
of the Ternary Metallic System
Bi-Cu-Sb at the Section $N_{bi}: N_{sb}=1:1$
by the E.M.F. Method, by A. L. Lomov,
A. N. Krestovnikov.
RUSSIAN, per, Zhur Prikl Khim, Vol XXXVIII,
No 1, 1965, pp 188-192.
*FTD-TT-65-1849

Organic Phosphorus Pesticides and Insecticidal Carbamic Acid Esters, by N. N. Mel'nikov, 41 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva, Vol 9, No 5, 1964, pp. 524-536.
JPRS 32875

Studies on Organophosphorus Compounds, by Hsu Yuan-yao, Chiang Hsi-chi, 13 pp.
CHINESE, per, Hua-hsueh T'ung-pao, Vol 30, No 6, Dec 1964, pp 526-532
JPRS 32985

Studies on Organophosphorus Compounds, by Lu Hsi-yen, Wang Kuo-liang, 10 pp.
CHINESE, per, Hua-hsueh Hsueh-pao, Vol 30, No 6, Dec 1964, pp 532-538
JPRS 33099

Research on Organophosphorus Compounds, by Wu Chun-ho, Wang Hsin-min, 6 pp.
CHINESE, per, Hua-hsueh Hsueh-pao, Vol 31, No 1, Feb 1965, pp 96-99
JPRS 33099

The Synthesis of a, a'- BIS-Isopropylbenzene Peroxide and its Uses, by Yang Ch'ing-sun, 20 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 6, 14 Jun 1965, pp 10-16.
JPRS 32894

Cyclization of β - Cyanoethyl Compounds, by Huang Hua-min, 22 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 6, 14 Jun 1965, pp 34-44.
JPRS 32894

Mechanism of Stereospecific Polymerization of -Olefins in Presence of Ziegler Catalysts, by Ts'ao Meng-chun, 17 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 9, 14 Sep 1965, pp 38-44.
JPRS 33087

A Rapid Method for Microdetermination of Phosphorous in Organic Compounds and Polymers - A Study of Oxygen Flask Combustion & Molybdenum Blue Photometric Method, by Yu Hsiang & Sha I-hsien, 15 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 9, 14 Sep 1965, pp 45-51
JPRS 33087

Extraction-Colorimetric Determination of Micro-Amounts of Molybdenum With Crystal Violet, by Kuo Ching-nan & Chin Jen-mei, 11 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 9, 14 Sep 1965, pp 51-54
JPRS 33087

Photometric Determination of Niobium With Acidic Chrome Blue K, by Ch'ien Fu-hsiang & T'ung Ming-hsi, 7 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 9, 14 Sep 1965, pp 54-56
JPRS 33087

Electrochemical Study on Chemical Ratio of InSb, by Yao Lin-sheng (1202 2651 5116) and Tsou Yuan-hsi (6760 0337 8764), 5 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 9, 20 Sept 1965, pp. 825-827
JPRS 33152

Dynamic Polarization of Protons in Some Polymers Using the Solid-effect Method, by J. Burget, V. Petricek.
CZECH, per, Chechoslovatskiy Fizicheskiy Zhurnal, Vol 12, No 12, 1962, pp 911-918.
*FTD-TT-65-1837

The Chemistry of Aqueous Solutions of Zirconium, by Rostislav Caletka, 41 pp.
CZECH, per, Chemické Listy, Vol LVIII, 1964, pp 349-375, 9230404.
AEC-tr-6618

Stabilization of Telflex, by M. Peterka.
CZECH, per, Chemické Zvesti, No 9, 1963, pp 656-665.
*FTD-TT-65-1821

X-ray Investigation of Fiber Textures in Alpha-Uranium Rods, by F. Volf.
CZECH, per, Jaderna Energie, Vol 10, No 4, pp 135.
*FTD-TT-65-1822

On the Effect of Light on Ketosteroid Separation, by E. Wallner, M. Kerepesi.
GERMAN, per, Acta Chirurgica, Vol IV, No 3, 1963, pp 181-188.
*FTD-TT-65-1867

Scientific
Chemistry (Contd)

N-Pyridinium-Sulphonic Acid (Second Report on the Decomposition of Pyridine to Glutaconic Acid Dialdehyde, by P. Baumgarten, 13 pp.
GERMAN, per, Berichte der Deutschen Chemischen Gesellschaft, Vol LIX, 1926, pp 1166-1171, 9230418.

AEC NP-tr-1304

Investigations on Friction and Adhesion. IV. Theory of Adhesion of Small Particles, by B. Derjaguin, 23 pp.
GERMAN, per, Kolloid-Zeitschrift, 9228266, Vol LXIX, 1934, pp 155-164.
AEC ORNL-tr-424

Electric Conduction in Mixtures of Metals and Their Salts, by A. H. N. Aten.
GERMAN, per, Zeit. fur Physik. Chemie, Vol 67, pp 578-597, 1910 9229591
AEC ANL-Tr-203

On the Chemical Distribution of Phosphorus-32 by Neutron Irradiation, by Hiroshi Baba, 17 pp.
JAPANESE, per, J. Atomic Energy Soc. Japan, Vol V, No 11, 1963, pp 917-924, 9230416.
AEC NSJ-tr-12

Thermodynamics for the Extraction of Uranyl Nitrate and Nitric Acid by Organophosphorus Compounds, by Tomota Nishi, Mitsuru Asano, 23 pp.
JAPANESE, per, J. Chem Soc. Japan Ind. Chem. Sect., Vol LXVI, No 10, 1963, pp 1428-1433, 9230415.
AEC NSJ-tr-13

Effect of Technological Parameters on the Properties of Aluminum Oxide Films, by D. Lange.
POLISH, per, Przegląd Elektroniki, No 10, 1964, pp 486-490.
*FTD-TT-65-1653.

The Neuromuscular Blocking Action of Some New Oximes, by Em. Manolescu, 8 pp.
RUMANIAN, per, Studii si Cercetari de Fiziologie, Vol IX, No 5-6, 1964.
JPRS 33040

Scientific
Earth Sciences & Astronomy

Aerosteological Research in Antarctica During the IOY, by L. V. Dolganov, 99 pp.
RUSSIAN, bk, Aerosteologicheskaya Issledovaniya Antarktiki, Sovetskoye Prosveteniye M.O., bk, Leningrad, 1964, 64 pp.
JPRS 32,909

Calculations of the Thermal Radiation of the Atmosphere, by Kh. Niylik.
RUSSIAN, per, Akad. Nauk. Est SSSR. Institut Fiziki i Astronomii. Issledovaniya po Fizike Atmosfery, No 2, 1960, pp 67-114.
*FTD-MT-65-569

Test Gravimetric Measurements on a Gyro-stabilized Base From Surface Vessels, by Ye. I. Popov and G. S. Markov, 29 pp.
RUSSIAN, per, Apparatura i Metody Eksperimental'nykh Issledovaniy po Gravimetrii, 1965, pp 3-22.
JPRS 32,652

Investigation of A Graf Gss-2 Sea Gravimeters, by Ye. I. Popov and Yu. P. Izmaylov, 23 pp.
RUSSIAN, per, Apparatura i Metody Eksperimental'nykh Issledovaniy po Gravimetrii, 1965, pp 23-38
JPRS 32,653

On the Mechanism of Energy Release during the Collapse of Superstars, by I. D. Novikov.
RUSSIAN, per, Astron Tsirkulyar, No 290, 1964, pp 1-5.
Dept of Navy Tr 4347/APL No T-1496

Evaluations of the Residual Terms of The Hill Series, by M. S. Petrovskaya.
RUSSIAN, per, Byulleten Institut Teoret Astronomii, AN SSSR, Vol IX, No 4, 1963, pp 257-273.
*FTD-MT-65-579

Optimum Transfer between close Coplanar Kepler Orbits, by G. A. Krasinskiy.
RUSSIAN, per, Byul Inst Teoret Astron., Vol IX, No 6, 1964, pp 425-439.
*Dept of Navy/APL No J-680

Scientific
Earth Sciences & Astronomy (Contd)

A Class of Attitude-Control Systems of Artificial Earth Satellites, by V. A. Bodner, K. B. Alekseyev, 21 pp. RUSSIAN, per, Unknown, 1965, pp 1-29. 9698285
FTD-MT-65-119

Classification of Orbital Orientation Systems of Artificial Earth Satellites, by Ye. N. Tokar', V. N. Branets, 13 pp. RUSSIAN, per, Unknown, 1965, pp 1-13. 9698658
FTD-MT-65-180

Study of Solar Plasma Flow by the Zond-2 Interplanetary Station, by V. V. Bezrukhikh. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLXIII, 1965, No 4, pp 873-876.
*FTD-TT-65-1946

Ecological and Geographical Variability of Soil Bacteria, by Ye. N. Mishustin. RUSSIAN, bk, Ekologo-geograficheskaya izmenchivost' Pochvennykh Bakteriy, 1947. *NASA TT F-413

Treating Telluric Current Graphs by the Method of True Ellipses, by G. N. Tkachev. RUSSIAN, per, Geologiya i Geofizika, No 11, 1963, pp 114-121.
*FTD-TT-65-1902

Simultaneous Radar and Aerological Observations in the Lower 1.5-km of the Atmosphere, by G. B. Brylev, et al. RUSSIAN, per, Glav Geofiz Observator, Trudy, Vol CLXXIII, 1965, pp 76-87.
*Dept of Navy/APL No J-694

Experimental Investigation of Water Vaporization in a Nonisothermal Turbulent Boundary Layer, by B. I. Fedorov. RUSSIAN, per, Inzhen Fiz Zhur, Vol VII, No 1, 1964, pp 21-27.
*FTD-TT-65-1974

In the International Scientific Organizations An International Paleontological Colloquium on the Pleistocene, and a Geomorphological Field Trip Through the German Democratic Republic, by N. S. Chebotareva, 16 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Ser Geograficheskaya 1964, No 2. ACSI I-8462-E
ID 2204049765

Scientific
Earth Sciences & Astronomy (Contd)

Determination of a Variable Electric Field in a Stratified Medium, by A. N. Tikhonov, G. V. Mikhina. RUSSIAN, per, Izvestiya Akademii Nauk SSSR, Seriya Geograficheskaya i Geofizicheskaya, Vol 14, No 2, 1950. *ACSI I-8418
ID 2204047765

Scientific Conference of the Moscow Institute of Geodetic, Aerial Photo Survey, and Cartographic Engineers, 6 pp. RUSSIAN, per, Iz Vyssh Ucheb Zaved, Geod i Aero, No 4, 1964, pp 137-140. ACSI I-6818
ID 2204011465

One Method of Solving Boundary-value Problems with a Condition at Infinity, by Yu. A. Klokov. RUSSIAN, per, Matemat Sbornik, Vol LXVII, No 2, 1965, pp 161-166.
*Dept of Navy/APL No J-692

Meteoric Matter in Interplanetary Space, by V. G. Fesenkov, 226 pp. RUSSIAN, bk, Meteoromaya Materiya v Mezhduplanetnom Prostranstve, Moscow, 1947. 9230373-V
NASA TT F-378

Variability of Ice Conditions in Northwestern Atlantic, by A. A. Lebedev. RUSSIAN, rpt, Materialy Sessii Ucherogo Soveta Pinro po Rezultatam Issledovaniy v 1962-1963, pp 123-129.
*Dept of Navy/Oceanograph Tr 261.

Effective Distribution of Aerological Stations in the Northern Hemisphere, by S. I. Gubanov, 12 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 8, 1965, pp. 26-32. JPRS 32943

New Computation of the Heat Balance of the Earth-Atmosphere System, by K. Ya. Vinnikov, 11 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 8, 1965, pp. 32-37. JPRS 32943

Scientific
Earth Sciences & Astronomy (Contd)

Statistical Analysis of Results of Tests of Methods for Forecasting Thunderstorms, by N. A. Bagrov, 11 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 8, 1965, pp. 40-46.
JPRS 32943

Literature on Meteorology and Hydrology for 1964, 8 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 8, 1965, pp. 60-62.
JPRS 32943

Vertical Ozone Distribution in the Earth's Atmosphere, by R. D. Boshkov, 13 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 10, 1965, pp 3-11.
JPRS 33250

Coordinate-Doppler Method of Wind Observations and Some Results of Investigation of Wind Field Heterogeneities in Atmosphere, by A. G. Gorelik, 13 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 10, 1965, pp 12-20
JPRS 33250

Allowance for the Characteristics of the Temperature-Pressure Field of the Lower Stratosphere in Compiling Seasonal Weather Forecasts, by Z. L. Turketti, 12 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 10, 1965, pp 21-28
JPRS 33250

Approximate Criterion for Determining the Possibility of Inducing Artificial Precipitation from Cumulus Clouds in the Ukrainian SSR, by G. F. Prikhot'ko, 5 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 10, 1965, pp 36-38
JPRS 33250

On The Tendency of Modern Climate Fluctuations, by I. Ye. Buchinskiy, 3 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 10, 1965, pp 38-42
JPRS 33250

Scientific
Earth Sciences & Astronomy (Contd)

Determination of Evaporation from a Land Surface, by L. I. Zubenok, 5 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 10, 1965, pp 42-44
JPRS 33250

Systematic Errors in Precipitation Measurement, by L. R. Struser, 10 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 10, 1965, pp 50-54
JPRS 33250

On the Intermediate Orbits of Artificial Satellites, by E. P. Aksenov.
RUSSIAN, per, Moskov Univ. Vest Ser III Fiz Astron, No 3, 1965, pp 36-45.
*Dept of Navy/APL No J-697

Mongolian Landscapes, (As Exemplified by the Hentey Mountainous Region and the East-Mongolian Elevated Plain), by Sh. Tsegmid, 6 pp.
RUSSIAN, rpt, O Landshaftakh Mongoli (Na Primere Khenteynskogo Gornogo Rayona i Vostochno-Mongol'skoy Pripodnyastoy Ravniny, ACSI I-8462-B
ID 2204049765

Preliminary Interpretation of Soils on Aerial Photographs in the Compilation of Large-Scale Soil Maps, by V. A. Kalnina, 17 pp.
RUSSIAN, per, Pochvovedeniye, No 8, 1965, pp. 81-88.
JPRS 33186

Solar Activity, by M. A. Livshits, 16 pp.
RUSSIAN, per, Priroda, No 6, Jun 1965, pp 48-57
JPRS 32994

Criteria for the Verification of Interpretation of Gravitational Anomaly, by K. M. Kartvelishvili.
RUSSIAN, per, Soobshchen Ak Nauk Tiflis, Gruzinz SSR, Vol XXV, No 6, pp 196-.
*Dept of Navy/Oceanograph Tr 267

Photography of Celestial Bodies, Photogrammetry, and Photo Interpretation in Space Investigations, by G. B. Gonin, 23 pp.
RUSSIAN, bk, Spetsial'nyye Voprosy Fotogrammetrii, 1964, pp. 5-20.
JPRS 32938

Development of a Multi-bucket Dredger
For Rocky Ground, by Ya. M. Rudin,
V. G. Matyunin, 6 pp.
RUSSIAN, per, Transportnoye Stroitel'stvo
No 1, 1965, pp 20-23.
DIA LN 113-65

Some Characteristics of Auroras as a Radar
Target and Allowance for Ionospheric-
Tropospheric Conditions in the Interpre-
tation of Polar Observation Results, by
Ye. F. Vershinin.
RUSSIAN, per, Trudy AN SSSR, Yakutskiy
Filial Institut Kosmofizicheskikh
Issledovaniya i Aeronomii, 1964,
pp 96-106.
*FTD-TT-65-1415 (2)

The Effect of the Characteristics of the
Optics of the S-180 Camera on the Deter-
mination of Brightness and Position of
Polar Auroras, by Yu. A. Nadubovich.
RUSSIAN, per, Trudy, AN SSSR, Yakutskiy
Filial Institut Kosmofizicheskikh
Issledovaniya i Aeronomii. Geo- i Gelio-
fizicheskiye Effekty V Kosmicheskikh Luchakh
Polyarnykh Silyaniyakh, 1964, pp 113-129.
*FTD-TT-65-1415 (1)

Determination of the Maximal Values
of Gravitational Drift and the Drift
Due to Unequal Rigidity of Floating
Integrating Gyroscopes, by G. A. Slomyanskiy.
RUSSIAN, per, Trudy Aviatsionnyy
Tekhnologicheskoy Institut, No 59,
1964, pp 74-82.
*FTD-TT-65-581

Soil Microbiology and its Tasks, by
Ye. N. Mishustin.
RUSSIAN, per, Trudy Instituta Mikrobiologii,
Akad. Nauk SSSR, Vol I, No 1, 1955,
pp 155-175.
*NASA TT-F-414

Geographical Distribution of Fishes and other
Commercial Animals of the Okhotsk and Bering
Seas, by L. A. Zenkevich, et al.
RUSSIAN, per, Trudy Inst Okeanol, Vol XIV,
1955, pp 73-115.
*Dept of Navy/Oceanograph Tr 264

A Parametric Method of Integrating
Laminar Boundary Layer Equations, by
L. G. Loytsyanskiy.
RUSSIAN, per, Trudy Leningrad Politek-
hnicheskoy Institut Tekhnicheskaya
Gidrogazodinamika, No 284, 1965,
pp 45-55.
*FTD-TT-65-1713

Numerical Solution of Equations of
1-Parameter Boundary Layer Theory, by
L. M. Simani, N. M. Terent'yev.
RUSSIAN, per, Trudy Leningrad Politek-
hnicheskoy Institut Tekhnicheskaya
Gidrogazodinamika, No 284, 1965,
pp 56-58.
*FTD-TT-65-1713

Atmospheric Turbidity in Central Asia, by
M. V. Sitnikova, 11 pp.
RUSSIAN, per, Trudy sredneasiatskogo nauchno-
issledovatel'skogo gidrometeorologicheskogo
instituta, No 22 (37), 1965, pp 51-59
JPRS 32997

Possibility of Radar Investigation of
Cloud Structure, by A. M. Borovikov,
V. V. Kostarev.
RUSSIAN, per, Trudy Vses Nauch Meteor
Soveshchaniya, Vol V, 1963, pp 325-332.
*FTD-TT-65-1859

Device For Multi-Point Measurement Of
Temperature, by S. P. Mazur.
RUSSIAN, per, Patent No 168497, pp 1.
*FTD-TT-65-1937

Device For Temperature Measurement, by
B. A. Pashkevskiy, M. G. Fridzon.
RUSSIAN, per, Patent No 168499, pp 1.
*FTD-TT-65-1938

General Survey of Hydrogeology, by
J. Abadie, J. Barbeau, 6 pp.
FRENCH, rpt, Apercu sur L'hydrogeologie,
1962, pp 29-34.
ACSI 1-8514
ID 282001363

Influence of Chairman Mao's Teaching on
Meteorological Research Work, by Chao Chi-
ping (1560 4764 1627), 14 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 10,
Oct 1965, pp. 847-852.
JPRS 32953

Scientific
Earth Sciences & Astronomy (Contd)

Development of Meteorology in Recent Years, by Yeh Tu-cheng (0673 4648 2973), 11 pp.
CHINESE, per, K'o-hsueh t'ung-pao, No 10
Oct 1965, pp. 884-888.
JPRS 32953

The Formation of the Second Maximum in the Cloud Graph, by Lin Hai, 7 pp.
CHINESE, per, K'o-hsueh t'ung-pao, No 10,
Oct 1965, pp 923-925
JPRS 32985

Research on Microphysical Mechanism of Rain from Warm Clouds, by Chou Hsin-chi (0719 4423 7535), 5 pp.
CHINESE, bk, Nuan-yun Chiang-shui Wei-wu-li Chih-chih ti Yen-chiu, Aug 1964, pp. i-vii.
JPRS 33152

Studies on Atmospheric Circulation in the Stratosphere and the Effect of Solar Activity on Atmospheric Circulation, pp.
CHINESE, monograph, P'ing-lai ts'eng Ta-ch'i Huan-liu chi T'ai-yang Huo-tung tui Ta-ch'i Huan-liu Ying-hsiang te Yen-chi, Feb 1964.
JPRS 33046

The Effect of the Earth's Oblateness on the Period of Revolution of an Artificial Satellite, by Chao Hsien-tsu, 16 pp.
CHINESE, per, T'ien-shan Hsueh-pao, Vol XII, No 2, Dec 1964, pp 169-179.
JPRS 32,969

Dry-Method Separation of Some Rare Earth Elements: Ytterbium, by Jean-Claude Achard, FRENCH, per, Compt Rend Acad Sci, Vol CCXLIV, 1957, pp 3059-3062. 9230448
AEC-ORNL-Tr-812

Direct Identification of Radioactive Nuclides in Sea Water, by G. Lambert, et al.
FRENCH, rpt, Identification Directe des Nuclides Radioactifs Dans L'Eau de Mer Par Spectrographie Gamma, 8 Apr 1961, pp 183-208.
*Dept of Navy/Oceanograph Tr 266

The Height and Period of Wave Motion in the Northern North Atlantic Ocean, by Hans Walden.
GERMAN, rpt, Sonderdruck aus der Deutschen Z Band 17, Sep 5, 1964, pp 232-235.
*Dept of Navy/Oceanograph Tr 270

Scientific
Earth Sciences & Astronomy (Contd)

Investigation of the Ionosphere with Radio-waves from Sate'lites and Rockets, Phase Methods, by K. Raver.
GERMAN, per, Space Science Reviews, Vol III, No 3, 1964, pp 380-432.
Dept of Navy Tr No 4345/APL No T-1495

Strength Theory of the Absolute Deviation of Sounding line as a Function of Free-Air Anomalies of Gravitation.
GERMAN, rpt, Veroffentlichungen des Geodatischen Instituts in Potsdam, No 13 1959, pp 1-46.
*Dept of Navy/Oceanograph Tr 269

Determining the Geoidanomalies from Free Air Anomalies, by Kurt Arnold.
GERMAN, rpt, Veroffentlichungen des Geodatischen Instituts in Potsdam, No 13, p. 1-50.
*Dept of Navy/Oceanograph Tr 269

On the Electrical Charge in Whirled-Up Dust Cloud Turbulences, by Erwin Boenstedt, 21 pp.
GERMAN, per, Zeitschrift fur Angewandte Physik, Vol vi, No 7, 1954, pp 27-30, 9230402.
AEC SC-t-65-757

Apparatus for the Measurement and Recording of the Elements of Atmospheric Electricity with Automatic Evaluation of Hourly Mean Values, by A. Kunkis, G. Ries, 9 pp.
GERMAN, per, Zeitschrift fur Geophysik, Vol XXX, No 1, 1964, pp 5-12, 9230403.
AEC SC-t-65-761

Automatic Recording and Transmission Installation for Meteorological Data, by G. Gerth and W. Hohn, 17 pp.
GERMAN, per, Zeitschrift fur Meteorologie, Vol 18, No 3-4, 1965, pp. 132-141.
JPRS 33101.

Studies of the Diffusion Phenomena in the Atmospheric Surface Layer Part 2: Diffusion of Smoke Puffs of the Floating Instantaneous-Source Type, by Eiichi Inoue,
JAPANESE, per, Nogyo Kisho, Vol XVI, 1961, pp 20-26. 9230465
UCRL-Trans-1229-L

FOA Explains about No 3 Underwater Sound, 42 pp.
SWEDISH, rpt, FOA Orienterar OM Hydroakustik, No 3, Feb 1965, pp 1-30.
Dept of Navy Tr 4354/ONI 2010

Scientific
Electronics

The Present Status and Directions for
Future Development of Multichannel Analyzers,
by I. S. Krashenninnikov.
RUSSIAN, rpt, No 79. 9230599
AEC-Tr-6606

Passive Radar, Thermal Radiowave Detection,
by A. Nikolayev.
RUSSIAN, per, Aviat i Kosmonav, No 1, 1964,
pp 73-77.
*FTD-TT-65-1901

Investigation of Self-learning Processes in a
Discriminating System with one Positive Feed-
back, by I. K. Parra.
RUSSIAN, per, Avtomatika, No 5, 1963, pp 58-68.
*FTD-TT-65-1850

Tentative Estimate of the Threshold Response
of a Television System From Stellar
Observations, by A. N. Abramenko, et al.
RUSSIAN, per, Dok Akad Nauk SSSR, CLXI,
No 6, 1965, pp 1299-1300.
NASA TT F-9689

Prospects for Producing High-Power
Magnetohydrodynamic Generators, by
Ye. Ya. Kazovskiy.
RUSSIAN, per, Elektrotehnika, No 9,
1964, pp 8-14.
*FTD-TT-65-1876

Electrochemical Transducers for
Acoustic-Signal Reception and Small-
Displacement Measurement, by
N. S. Lidorenko, I. N. Moiseyev, et al.
RUSSIAN, per, Elektrotehnika, No 3,
1965, pp 3-5.
*FTD-TT-65-1875

Investigation of the Motion of a Plasma
in a Gas-Discharge Tube Equipped With
Coaxial Electrodes, by E. K. Chekalin,
V. I. Trukhin.
RUSSIAN, bk, Fizicheskaya Gazodinamika
Svoystva Gazov Pri Vysokikh Temperaturakh,
An SSSR Energeticheskii Institut. 1964,
pp 59-72.
*FTD-TT-65-1890

Scientific
Electronics (Contd)

Formation of a Self-Adaptive Signal in Self-
adaptive Systems with Frequency Filters,
by V. I. Kostyuk.
RUSSIAN, per, Iz Ak Nauk SSSR, OTN, Tekh,
Kibernet, No 2, 1963, pp 165-173.
Dept of Navy Tr 4344/APL No T-1494

Equipment for Stabilization of Inhomogeneous
Magnetic Fields, Based on Electron Paramagnetic
Resonance, by S. P. Pivovarov, Yu. A. Ryabikin,
et al.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Fiz,
Vol XXIX, No 1, 1965, pp 166, 167.
*FTD-TT-65-1835

On the Thermal Conductivity of the Solid
Solution (Sb₂Te₃)-(Bi₂Se₃), by
G. V. Kokosh, Kh. M. Kuliev, et al.
RUSSIAN, per, Iz Ak Nauk Turkmenskoy SSR,
Seriya Fiziko-Tekhnicheskikh, Khimicheskikh
i Geologicheskikh Nauk, No 5, 1963,
pp 23-28. 9230428
AEC-Tr-6587

On the Theory of Thermoelectrical Pheno-
mena, in Electrolytic Solutions,
by M. I. Temkin, A. V. Khowshin.
RUSSIAN, per, Journal of Physical Chemistry,
Vol XXVI, No 1, 1952. 9230542
AEC-AI-Tr-98

Automation of Planning-Construction
Operations With the Aid of Digital
Electronic Computers, by G. K. Goranskiy,
18 pp.
RUSSIAN, per, Mekhanizatsiya i Avtom
Proiz, No 6, 1962, pp 45-50. 9698642
FTD-TT-65-1149

Extending the Zone of Radar Navigational
Guidance in the Approaches to Leningrad,
by V. Shchegolev, 9 pp.
RUSSIAN, per, Morskoy Flot,
No 11, Nov 1964, pp 22-23.
DIA LN 145-65

Radar Observations of Drifting Ice in the
Tatut Straits, by V. Zhmurko, 9 pp.
RUSSIAN, per, Morskoy Flot, No 11,
Nov 1964, pp 23-24.
DIA LN 145-65

The Use of the Electromagnetic Method for Investigating Residual Thermal Stress in Ceramics, by V. N. Rudakov. RUSSIAN, bk, Nauchnoye Soveshchaniye po Teplovym Napryazheniyam v Elementakh Konstruktsiy. 4th Teplovyye Napryazheniya v Elementakh Konstruktsiy.; Doklady Soveshchaniya, 1964, pp 314-322. *FTD-TT-65-1965

Several Possibilities of the Eddy-Current Method for Many Perimetric Control on Construction Elements, by V. G. Vyakhorev, V. G. Gerasimov. RUSSIAN, bk, Nekotoryye Vozmozhnosti Metoda Vkhrevykh Tokov Dlya Mnogoparametrovogo Kontrolya Elementov Konstruktsiy, 1965, pp 1-26. *FTD-MT-65-563

The Direct Conversion of Thermal Energy into Electrical Energy, by S. Klein. RUSSIAN, rpt, Proceedings 5th Int Conf. Ionization Phenomena in Gases, Munich, 1961, pp 806-814. 9230596 AEC-BNL-Tr-29

Radar Observations of Venus Carried out in the Soviet Union in 1964, by V. A. Kotel'nikov, Yu. N. Aleksandrov, et al. RUSSIAN, bk, Radiolokatsionnye Nablyudeniya Venery v Sovetskom Soyuze v 1964 g., 12 pp. Dept of Navy Tr 4359/NRL No 1035

Detection Characteristics, by M. S. Katsenbogen, 81 pp. RUSSIAN, rpt, Sovetskoye Radio Publishing House, 1965, Moscow, Encl to IR 1-901-0195-65 DIA LN 24-65

The Interchangeability of Vacuum Tube and Semiconductor Instruments, by B. V. Katsnel'son, 9 pp. RUSSIAN, per, Standardizatsiya, No 9, 1964, pp 43-46. 9688325 FTD-TT-65-897

Spin Oscillator, by R. M. Umarhodzhayev. RUSSIAN, per, Vest Moskov Univ, Ser III, Fiz Astron, No 5, 1964, pp 88, 89. *FTD-TT-65-1899

Vibrational Frequency of Hydrazine Molecule N_2H_4 , by Yu. I. Kotov. RUSSIAN, per, Vest Moskov Univ, Ser II, Khim, No 3, 1963, pp 10-13. *FTD-TT-65-1900

Computers in Automatic Systems, by A. A. Fel'dbaum, 17 pp. RUSSIAN, per, Vychislitel'nyye Ustroystva v Avtomaticheskikh Sistemakh, 1959, pp 367-376. 9698226 FTD-TT-65-618

Symposium on Hydroelectric Power Station Operation and Electric Equipment Design, by Cheng-Sheng Chao. CHINESE, per, K'o Hsueh T'ung Pao, No 2, 1965, pp 179-180. *FTD-TT-65-1950

Development of Electronic Technology, by Chen Fang-yun, 16 pp. CHINESE, per, K'o Hsueh T'ung Pao, No 10, Oct 1965, pp 870-874 JPRS 33121

Tropospheric Scatter Communications (I), by Wu Te-yan, 9 pp. CHINESE, per, T'ien-tsu Chi-shu, No 11, Nov 1964, pp 19-20, 23 JPRS 32989

Tropospheric Scatter Communications (II), by Wu Te-yan, 9 pp. CHINESE, per, T'ien-tsu Chi-shu, No 12, Dec 1964, pp 14-16 JPRS 32989

Computing Method for Linear Time Optimal Control Systems, by Ju-Wei Tai, CHINESE, per, Tzu Tung Hua Hsueh Pao, Vol II, No 3, 1964, pp 123-135. *FTD-TT-65-1921

Synthesis of Multiterminal Switching Circuits by Means of General Coding, by Sung, Jui-Ch'i. CHINESE, per, Tzu Tung Hua Hsueh Pao, Vol III, No 1, pp 41-44, 1965. *FTD-TT-65-1854

Scientific
Electronics (Contd)

Nomenclature for Domestically Produced Vacuum Tubes, 5 pp.
CHINESE, per, Wu-hsien-tien, No 4, 12 Apr 1965, inside frontcover.
JPRS 32868

Domestic Intermediate Frequency Transformers, by Hao Po (3185 3134), 11 pp.
CHINESE, per, Wu-hsien-tien, No 7, 12 Jul 1965, pp. 18, 19.
JPRS 32868

Letter Symbols Frequently Used in Radio Technology, by Ku Meng Chieh (7357 1322 3381), 9 pp.
CHINESE, per, Wu-hsien-tien, No 8, 12 Aug 1965, pp. 16, 20.
JPRS 32868

Forbidden Lines in the Hyperfine Spectrum of the Electron Paramagnetic Resonance of Mn++ in Batio Sub 3, by M. Odehnal.
CZECH, per, Chekhoslovatskiy Fizicheskiy Zhurnal, Vol 13, No 8, 1963, pp 566-572.
*FTD-TT-65-1838

Targets of High-Yield Neutron Generators, by Zbynek Hulek.
CZECH, per, Cs Cas Fys, Vol XIV, 1964, pp 467-479. 9230454
AEC-SC-T-65-755

Optimal Pushing of RC Oscillators, by A. Melezinek, 5 pp.
CZECH, per, Slaboproudy Obzor, No 1, 1962, 2 pp.
ACSI I-7799
ID 2204036365

Operator Method for Calculating Beams on an Elastic Base and Stresses by Longitudinal and Transverse Loads, by G. Eggenberger.
CZECH, per, Strojnicky Casopis, No 2, 1964, pp 105-123.
*FTD-TT-65-1952

Scientific
Electronics (Contd)

Excitation Functions of the Metastable States of Helium and Neon Measured With the Aid of Secondary Electron Emission, by Richard Dorrestein.
DUTCH, bk, Aanslagfuncties van Metastabiele Toestanden, Gemeten Met Behulp van Secundaire Electronenemissie voor Helium en neon, Thesis, Utrecht, 1941. 9230531-V
UCRL Trans 1258(L)

Electrodes a Diffusion Laterale, by D. Doniat.
FRENCH, rpt, Excerpt (Sect. IV) from Thesis submitted by D. Doniat, Paris, 1965. 22 p.
*NASA TT F-9852

A Process for Conversion of Ionizing Energy Into Electricity, by Siegfried Klein, Jacques Preve.
FRENCH, per, Le Journal de Physique et le Radium, Vol XXIII, Nos 8/9, pp 588-589. Aug-Sep 1962. 9230426
AEC-BNL-Tr-8

The Concept of Acoustic Impedance, by W. Willms, 6 pp.
GERMAN, per, Acustica, Vol IV, No 1, 1954, pp 427-432.
*Dept of Navy/USRL Tr No 51

The Acoustic Analog of the Yagi Antenna, by E. G. Neumann, 6 pp.
GERMAN, per, Acustica, Vol XV, No 5, 1965, pp 295-300.
Dept of Navy Tr 4365/USRL Tr No 49

Investigation of the Absorption of Waterborne Sound in the Frequency Range 1 kHz to 6 kHz, by E. Bocher, 9 pp.
GERMAN, per, Acustica, Vol XV, No 6, 1965, pp 418-426.
Dept of Navy Tr

Electrical Current in Ionized Air in a Flat Condenser, by Gustav Mie.
GERMAN, per, Annalen der Physik, Vol XIII, No 5, 1904, pp 857-889. 9230456
AEC-ORNL-Tr-501

Contributions to the Theory of the Electroacoustic Transducers, by F. Spandock, 21 pp.
GERMAN, per, Frequenz, Vol XV, pp 29-33; Vol XV, No 11, pp 365-371; Vol XV, No 12, pp 404-412, 1961.
*Dept of Navy/USRL

Scientific
Electronics (Contd)

Some Applications of the Reciprocity Principle in Acoustics, by M. Heckl, 12 pp.
GERMAN, per, Frequenz, Vol XVIII, No 9, 1964, pp 299-304.
Dept of Navy Tr 4333/USRL Tr No 48

Nonlinear Behavior of Junction Transistors at Higher Frequencies, by R. Paul.
GERMAN, per, Nachrichtentechnik, Vol XI, No 5, 1961, pp 213-220.
Dept of Navy Tr 4348/APL T-1497

Radioactive Collector for Atmospheric Electricity Soundings, by G. Ronicke.
GERMAN, per, Zeit fur Geophysik, Vol XXX, No 1, pp 43-44, 1964. 9230460
AEC-SC-T-65-760

A Gamma-Gamma Angular Correlation Spectrometer with 4 Detectors, by K. Fricke, F. Munnich, et al.
GERMAN, per, Z f Instrumentenkunde, Vol LXXI, No 10, 1963, pp 277-283.
Dept of Navy Tr 4358/NRL Tr No 1032

Wire Scanner with Automatic Decay Correction System, by Setsuo Kobayashi.
JAPANESE, per, Nippon Genshiryoku Gakkaishi, Vol 5, No 10, pp 854-861, 1963
AEC NSJ-Tr-15 9229803

The Rapid Determination of L-Leucine, L-Isoleucine, and L-Valine in a Mixture by Infrared Spectrometry, by Shinichiro Kaga, Taizo Hayashi,
JAPANESE, per, Nippon Nageikagakii Kai-shi J. Agr. Chem Japan, Vol XXXVII, No 2, 1963, pp 116-117. 9230464
AEC-ORNL-Tr-841

Dependence of DC-Conductivity or Organic Dielectric Upon Working Conditions and External Factors (I), by M. Kryszewski, H. Kurczewska, 12 pp.
POLISH, per, Przegląd Elektroniki, No 4, 1964, pp 190-198. 9698628
FTD-TT-65-895

Telecommunications, by Parana State Public Works and Roads Secretariat, 29 pp.
PORTUGUESE, rpt, Published by Parana State, Brazil, 1964, Curitiba,
DIA LN 170-65

Scientific
Electronics (Contd)

Low-impedance pulse Generator for Intense Short Pulses, by O. Nistor, E. Camachl, et al.
RUMANIAN, per, Telecommunicatii, No 5, 1965, pp 147-151; 152-157; 164, 165.
*ACSI I-7870
ID 2204039365

Editorial: Compressed Air in the Cables; Economic Facts; Another New Telephone Plant at Jovellancos, 15 pp.
SPANISH, per, Boletin Telefonico, Vol II, Nos 11-12, Oct-Nov, 1964, pp 2-3; 9-12; 14-15; 17.
DIA LN 107-65

Properties of Certain Structures of Multi Variable Systems With Controlling Models, by K. D. Zhuk, 14 pp.
UKRAINIAN, per, Avtomatika, No 4, 1964, pp 3-9. 9698641
FTD-TT-65-875

The Development of Electrification in the Ukrainian SSR, 1959-1965, by G. B. Yakusha, 40 pp.
UKRAINIAN, rpt, Published by Society for the Dissemination of Political and Scientific Literature, 1959,
DIA LN 151-65

Photoelectric Properties of Heterojunctions of Some Semiconductors, by Zh. I. Alf'orov, M. S. Zimogorova, 5 pp.
UKRAINIAN, per, Ukrayins'kyy Fiz Zhur, Vol IX, No 6, 1964, pp 659-663. 9698634
FTD-TT-65-646

Electronic Structure and Properties of Hydrides of Transition Metals, by G. V. Samsonov
UKRAINIAN, PER, Ukrainskii Khimicheskii Zhur, Vol XXXI, 1965, pp 433-439. 9230451
AEC-SC-T-65-748

Scientific
Engineering

Use of Two-Dimensional Image Filtration for Increasing the Reliability of Automatic Reading. Part I. Experiments in the Processing and Writings of Machine Written Characters by Digital Computer, by V. P. Romanov.
RUSSIAN, per, No 7, 1964, pp 24-26.
*FTD-TT-65-1894

A Method For Studing Stresses And Deformations, by Yu. V. Markovskiy.
RUSSIAN, per, Patent No 162685, pp 1.
*FTD-TT-65-1933

Instrument For Measuring Superheat Temperature Of Rotating Machine Parts, by V. K. Mochalov.
RUSSIAN, per, Patent No 168916, pp 1.
*FTD-TT-65-1939

Anemometer For Measuring Small Gas Flow Rates, by G. G. Belov.
RUSSIAN, per, Patent No 168949, pp 1.
*FTD-TT-65-1940

A Method For Attaching Wire Transducers Under Hydrostatic Pressure, by Yu. D. Mazur-Dzhurilovskiy.
RUSSIAN, per, Patent No 169160, pp 1.
*FTD-TT-65-1941

A Method For Fastening Electrical Strain Gauge Resistance Elements To A Metal Frame, by A. E. Mandel'shtam.
RUSSIAN, per, Patent No 169161, pp 1.
*FTD-TT-65-1942

Contribution to the Calculation of Automatic Control System, by B. Z. Zil'berman.
RUSSIAN, per, Avtomatika, Vol IX, No 5, 1964, pp 3-14.
*FTD-TT-65-1852

Vaporizing Combustion Chambers of Gas Turbine Engines and the Features of Their Operations, by Ye. P. Fedorov, Yu. I. Shal'man.
RUSSIAN, per, Avtomobil Prom, No 5, 1964, pp 42-45.
*FTD-TT-65-1855

Scientific
Engineering (Contd)

Relative Effectiveness of Different Types of Chromium Plating by P. I. Zemskov.
RUSSIAN, per, Avtomobil Prom, No 8, 1964, pp 37-40.
*FTD-TT-65-1856

On the Knocking Characteristics of Air Cooled Engines, by I. V. Markova.
RUSSIAN, per, Avtomobil Prom, No 9, 1964, pp 5-7.
*FTD-TT-65-1858

The Effect of Combustion Chamber Geometry on the Tendency of Knocking in Carbureting Engines, by L. S. Sukharova.
RUSSIAN, per, Avtomobil Prom, No 10, 1964, pp 5-10.
*FTD-TT-65-1857

On Some Deficiencies of the Classical Boundary-layer Theory, by L. A. Chudov.
RUSSIAN, rpt, Chislennyy Medoty v Gazovoi Dinamike, Moscow, Vol II, 1963, pp 98-109.
Dept of Navy Tr 4338/APL No T-1481

Experience in Computing the Turbulent Flux of Heat and the Expenditure of Heat on Evaporation, by N. A. Timofeyev.
RUSSIAN, per, Dal'nevost Nauch Issled Gidrometeor, No 15, 1963, pp 167-180.
*FTD-TT-65-1814

Determination of Loss Parameters of a Ruby Quantum Generator, by B. I. Stepanov, et al.
RUSSIAN, per, Dok Ak Nauk BSSR, Vol IX, No 6, 1965, pp 367-371.
*Dept of Navy/APL No J-701

On Methods of Investigating the Buckling of Longitudinally Corrugated Cylindrical Shells, by H. L. Komisarova.
RUSSIAN, per, Dopovidi Ak Nauk Ukrain RSR, No 1, 1965, pp 33-36.
*FTD-TT-65-1947

Limiting Power of Closed-Cycle Gas Turbines, by V. I. Batishchev, 12 pp.
RUSSIAN, per, Energomashinostroyeniye, No 4, 1964, pp 14-16. 9698625
FTD-TT-65-626

Scientific
Materials & Metallurgy (Contd)

Foamed Glass - II, by E. O. Schulz.
GERMAN, per, Silikattech., Vol 5, 1954,
pp 343-346.
*BISI 4571

The Problem in the Automation of the
Oxygen Blowing Process - II. Development
of Mathematical Models for the Oxygen
Blowing Process and First Results, by
E. Kapfer.
GERMAN, per, Stahl und Eisen, Vol 85,
25 Mar 1965, pp 331-341.
*BISI 4457 Pt 2

Calculation of Coolant for the Basic
Oxygen Process With Pig Iron Low and
Rich in Phosphorus, by H. vom Ende,
W. D. Liestmann.
GERMAN, per, Stahl Eisen, Vol 85,
25 Mar 1965, pp 342-353.
BISI 4378

Progress and Problems in Metallurgical
Dust-Collecting Plants, by H. Weineck.
GERMAN, per, Staub, Vol 24, Nov 1964,
pp 475-485.
*BISI 4569

Crash Barriers - Safety Rails for Roads,
by K. Idleberger.
GERMAN, per, Strassenbau, Vol 55,
May 1964, pp 368-371.
*BISI 4572

Steel Sheet Roads Prove Themselves.
GERMAN, per, Strassenbau, Vol 55
May 1964, pp 372.
*BISI 4573

A Newly Developed Compound - Cast Steel
for Wear Exposed Installations, by
A. Harnisch, et al.
GERMAN, per, Werks. Korros., Vol 16,
Mar 1965, pp 185-189.
*BISI 4554

Repetition of Tube Life Firing Tests on a
Nitrided and Hard Chromium Plated Tube for the
20 mm Hispano Suiza 820 Automatic Cannon,
by Ing. Spangenberg, VA (t) Mandalka, 14 pp.
GERMAN, rpt, Wiederholung des Rohrlebens-
dauerbeschusses eines Nitrierten und
Hartverchromten Rohres fur MP mm HS 820
(Test Report), 20 Oct 1961, pp 1-14.
ACSI I-8954C
ID 2204866765

Scientific
Materials & Metallurgy (Contd)

On the Physics of the Shaping of Metal
With High Magnetic Field Pulses, by
H. J. Lippmann, H. Schreiner,
GERMAN, per, Zeit fur Metallkunde,
Vol LV, No 12, 1964, pp 737-740. 9230440
AEC-NP-Tr-1284

The Start of Precipitation From
Supersaturated Solid Solutions,
by Erhard Hornbogen
GERMAN, per, Z. Metallkde, Vol LVI,
No 3, 1965, pp 133-154. 9230481
AEC-ORNL-Tr-637

Occurrence of Steam Jets in Carbon Arcs
With High Current, by R. Wienecke.
GERMAN, per, Zeitschrift fur Physik,
No 151, 1958, pp 159-173.
*BISI 4574

The Oxidation Speed of Zinc Alloys,
by C. Gensch, K. Haufler.
GERMAN, per, Zeit fur Physik Chemie,
No 196, 1950, pp 427-437.
*FTD-TT-65-1908

Rolling Torque and Rolling Pressure,
by A. Geleji, 8 pp.
HUNGARIAN, per, Academia Scientiarum
Hungaricae, Acta Technica, Vol XLV,
No 1, 1964, pp 275-281. 9698356
FTD-TT-65-235

Problems of Rolling Modern I and U Beams,
by G. Devenyi.
HUNGARIAN, per, Koh. Lapok, Vol 97,
Dec 1964, pp 552-557.
BISI 4434

The Role of Tin-Bronze Alloys With
Two or More Components in Bearings,
by K. Marechal, 18 pp.
HUNGARIAN, per, Ontode a Kohaszati
Lapok Melleklote, Vol XV, No 1, 1964,
pp 10-15. 9698627
FTD-TT-65-563

Technology of Liquid Metals, by H. Wesley
Savage, S. Moretti.
ITALIAN, rpt, 1965.
AEC-ORNL-Tr-854

Scientific
Engineering (Contd)

Oils for Gas Turbine Installations,
by B. V. Liskov, A. D. Fat'yanov, et al.
RUSSIAN, per, Khim i Tekh Toplivo i Masel,
No 3, 1964, pp 58-62.
*FTD-TT-65-1843

Employment of Tanker's Loading System
for Pressure Jet Heating of Pol Products,
by G. Shvrov, 6 pp.
RUSSIAN, per, Morskoy Flot, No 6, June
1963, pp 22-24.
DIA LN 165-65

Power Characteristics of Fuels for Gas
Turbine Aviation Engines, by V. N. Zrellov.
RUSSIAN, per, Neftepererabota i Neftekhimiya,
No 2, pp 22-26. 1964.
*FTD-TT-65-1905

Solution of an Antisymmetric Problem
in Deformation for a Conical Shell With
Linearly Varying Thickness on the BESM-2M
Computer by Ya. M. Grigorenko,
T. I. Polishchuk,
RUSSIAN, per, Prikladnaya Mekhanika,
1965, Vol 1, No 2, pp 129-134.
*FTD-MT-65-561

Wings in Hypersonic Flow, by G. G. Chernyy
RUSSIAN, per, Prikladnaya Matematika i
Mekhanika, Vol XXIX, No 4, pp 616-634,
1965.
*FTD-MT-65-566

Diffusion of Laminar and Turbulent Axisymmet-
rical Fan-Shaped jets in a Submerged Space,
by G. I. Grodzovskiy.
RUSSIAN, per, Prom Aerodina, 1962, No 23,
pp 66-71.
*FTD-TT-65-1971

Discharge of a Free Turbulent Jet into a
Medium in Motion, by G. L. Grodzovskiy, 25 pp.
RUSSIAN, per, Prom Aerodina, 1962, No 23,
pp 119-165.
*FTD-TT-65-1971

Experimental Investigation of a Jet in a
Counter Flow, by L. I. Ilizorova, 9 pp.
RUSSIAN, per, Prom Aerodina, 1962, No 23,
pp 107-118.
*FTD-TT-65-1971

Scientific
Engineering (Contd)

Replacement of Lead Acid Storage
Batteries With Alkali Batteries
on Ships of the Rocket Type, by
K. Andreyev,
RUSSIAN, per, Rechnoy Transport, No 7,
1964, pp 42-43.
*FTD-TT-65-1879

The Effect of Lattice Deformations on
Paramagnetic Resonance, by N. G. Koloskova.
RUSSIAN, bk, Sb. Paramagnitn. Rezonans.
Kazan', Kazansk. Un-T, 1964, pp 115-133.
*FTD-MT-65-572

Processes With Independent Random Variables,
by A. V. Skorokhod.
RUSSIAN, bk, Sluchaynyye Protsessy S
Nezavisimymi Prirashcheniyami, 1964,
pp 1-278.
*FTD-MT-65-574

The Present Day Status of the Problem
of Wave Protection and Strengthening
Slopes, by F. F. Molero, 64 pp.
RUSSIAN, rpt, Sovremennoye Sostoyaniye
Problemy Volnozashchity i Krepleniya
Otkosov, 1964.
ACSI T-8658
ID 2204057565-V

Effect of the Lateral Components of the
Forces of Suction of Screw Propellers on the
Handiness of a Twin-Screw Vessel, by S. I.
Devnin, 7 pp.
RUSSIAN, per, Sudostroyeniye, No 7, Jul
1965, pp 12-15
JPRS 32998

Periodic Forces Acting on the Hull of a
Ship during the Operation of a Shrouded
Propeller, by L. F. Karasik, 6 pp.
RUSSIAN, per, Sudostroyeniye, No 11,
Nov 1965, pp. 14-16.
JPRS 33023

Structure, Parameters and Interaction
of Supersonic Jets in Contemporary
Vacuum Pumps, by S. I. Kosterin,
N. I. Yushchenkova, 21 pp.
RUSSIAN, per, Teplo- i Massopereenos,
Obshchiye Voprosy Teploobmena, Vol VII,
1963. 9698288
FTD-MT-65-206

Scientific
Engineering (Contd)

Problem of Flame Emanation in Liquid
Fuel Gas Turbine Combustion Chambers,
by V. I. Antonovskiy, Ya. P. Storozhuk,
17 pp.
RUSSIAN, per, Teploenergetika, No 3, 1965,
pp 41-47. 9698654
FTD-TT-65-858

Thermodynamics, Heat Transfer, by
A. V. Bolgarskiy, G. Mukhachev.
RUSSIAN, bk, Termodinamika i Teploperedacha,
1964.
*FTD-TT-65-1967

Construction of a Quay Wall for the Novorossiysk
Ship Repair Yard, by V. A. Tomadzye, 5 pp.
RUSSIAN, per, Transportnoye Stroitel'stvo,
No 3, Mar 1964, pp 23-24.
DIA LN 167-65

Air Cushion Transport Vehicles, by S. A.
Adasinskiy.
RUSSIAN, bk, Transportnyye Mashiny Na Voz-
dushnoy Podushke, 1964, pp 23-29, 30-35;
36-43, 79-84, 85-95, 96-102; 107.
*FTD-TT-65-564

The Influence of Initial Turbulence on the
Boundaries and Range of Submerged Jets,
by Yu. A. Shcherbince.
RUSSIAN, per, Trudy Fiz Tekh Inst, 1961, No 7,
pp 152-157.
*FTD-TT-65-1945

Marine Fouling and Borers.
RUSSIAN, per, Trudy Inst Okeanol, Morsk
Obrazan i Drevoto, Vol LXX, 1963, 279 pp.
Dept of Navy Tr 4356/Oceanographic Tr 221

Application of Methods of Asymptotic
Separations According to the Degrees of
the Small Parameter for the Study of
Vibrations of Mechanical Systems,
Taking Energy Scattering in the Material
Into Account, by G. S. Pisarenko.
RUSSIAN, per, Trudy Mezhdunar Simpoziuma
po Nelineyn. Kolebaniyam, 1961, Ak
Nauk SSSR, 1963, pp 347-374.
*FTD-TT-65-1954

Scientific
Engineering (Contd)

Stability in Adaptive Control Systems,
by R. Tar'yan.
RUSSIAN, per, Trudy Simpoziuma Samonastraiiv
Avtomat Sistemy, 1964, pp 53-64.
*FTD-TT-65-1861

Application of the Theory of Invariance to
the Synthesis of Inertial Navigation
Systems, by Ye. G. Smenkovskiy.
RUSSIAN, per, Trudy Sovesh. Teor Invariant
v Sistemakh Avtomat Upravl., Kiev, 1962,
1964, pp 449-456.
*FTD-TT-65-1860

Photon Reaction Engine, by Ye. S. Fridenson.
RUSSIAN, per, Vest Prot Oborony, No9,
1964, pp 67-71.
*FTD-TT-65-1815

The Geodetic Network and Artificial Earth
Satellites, by N. P. Yerpylev, 9 pp.
RUSSIAN, per, Zemlya i vseleennaya, No 4,
Jul-Aug 1965, pp. 65-69.
JPRS 32431

Interaction of the Boundary Layer With
An External Flow Caused by Radiative
Heat Transfer, by V. V. Lunev, A. N. Rumynskiy,
20 pp.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz,
Vol VII, No 6, 1961, pp 44-53. 9698231
FTD-TT-65-958

Directed Throwing of Bodies by
Explosion Products, by G. M. Lyakhov,
15 pp.
RUSSIAN, per, Zhur Prik Mekh i Tekh
Fiz, No 3, 1962, pp 44-52. 9698515
FTD-TT-65-156

Analogy Between Cylindrical Explosion
and Hypersonic Gas Flow Past Bodies,
by V. P. Korobenynikob, 10 pp.
RUSSIAN, per, Zhur Prik Mekh i Tekh
Fiz, No 6, 1962, pp 45-49. 9697810
FTD-TT-65-981

Approximate Calculation of Eigenvectors,
by B. P. Pugachev.
RUSSIAN, per, Zhur Vychisl Matemat i Matemat
Fiz, Vol IV, No 2, 1964, pp 304-343.
Dept of Navy 4336/APL No T-1478

Scientific
Engineering (Contd)

Application of "Artificial Viscosity" to numerical Solution of an Inverse Problem of Gas-Dynamics, by L. I. Severinov. RUSSIAN, per, Zhur Vychisl Matemat i Mate, Vol V, No 3, 1965, pp 566-571.
*Dept of Navy/APL No J-685

A Measurement Interference Generator, by L. Andera. CZECH, per, Sbornik Brunn Vojenski Akademie Rada B, No 4, 1962, pp 77-85.
*FTD-TT-65-1499

Losses in a Stage of an Axial Turbine at Flow Velocities Close to Sonic, by O. Bunata. CZECH, per, Vyzkumny a Zkusebni Letecky Ustav. Zpravodaj Vzlu Letnany, No 6, 1963, pp 9-15.
*FTD-TT-65-1846

The Role of Netherlands Industry in the Development Program for a Marine Reactor in the Netherlands, by M. Bogaardt, 7 pp. DUTCH, per, TNO Nieuws, No 210, Aug 1963, pp 440-448.
Dept of Navy Tr 4362/ONI 2012-a

Temperature Sensing System For Manometric Thermometers, by Blyumshteyn, Z. G., V. S. Cherepanov, E. Z. Miftakhov, A. G. Spasskiy, B. A. Fomin, N. P. Koroleva. RUSSIAN, per, Patent No 166520, 13 Jan 1864, pp. 1.
*FTD-TT-65-1934

Future Prospects of Various Reactor Types for Ship Propulsion, by J. I. Sonneveld, 7 pp. DUTCH, per, TNO Nieuws, No 210, Aug 1963, pp 445-448.
Dept of Navy Tr 4363/ONI 2012-b

Development of Instruments for Graphic Determination of the Principal Characteristics of a Supercritical flow in a Curved Channel, of Rectangular Cross-Section, by F. Sananes, T. Acatay. FRENCH, per, Comptes Rendus, Vol CCLV, No 14, 1962, pp 1572-1574.
Dept of Navy Tr 4350/APL No T-1514

Scientific
Engineering (Contd)

Study of the Stopping Power of Various Filters, by Guy Madelaine, FRENCH, rpt, Ingenieur CNAM, 1964. 9230441
AEC-WP-Tr-1287

Refining Test of the Grain of Cast Beryllium by Combined Mechanical and Heat Treatments, by C. Gasc, J. Barbier. FRENCH, per, Mem Sci Rev Met, Vol LXI, No 6, 1964, pp 475-480. 9230446
AEC-ORNL-Tr-720

Hall-Type Magnetohydrodynamic Generators, by L. Rothhardt. GERMAN, per, Beitrage Aus Der Plasmaphysik, Vol 4, No 142, 1964, pp 33-39.
*FTD-TT-65-1825

Interference Effects Produced by Gaseous Side-jets Issuing into Supersonic Streams, by F. Maurer. GERMAN, per, DVL, Bericht, No 382, 1964, pp 3-85.
*Dept of Navy/APL No J-689.

Pulse Analysis, by F. A. Fischer. GERMAN, per, Impulstechnik, 1956, pp 1-39.
Dept of Navy Tr 434/APL No T-1490

Stereotrigomat, 47 pp. GERMAN, rpt, Stereotrigomat, pp 1-36. ACSI I-8486
ID 2204050165

Formulas for Transforming Spherical Functions when the Coordinate System Changes Linearly, by Ad. Schmidt. GERMAN, per, Z fur Mathematische Physik, Vol XLIV, 1899, pp 39-42.
Dept of Navy Tr 4352/APL No T-1516

Scientific
Engineering (Contd)

Production of Uranium Carbide Fuel rods
Clad with Sap for Irradiation in the NRX
Reactor NRX Experiment 716, by R. Kiersy,
G. Musso, et al.
ITALIAN, rpt, 1964. 9230567
AEC-ORNL-Tr-798

Numerical Examination on the Fulfillment of
Natural Boundary Conditions by the Approximate
Solutions for Bending and Vibration of Thin
Plastic Plates based on the Rayleigh-Ritz
Procedure, by Tadahiko Kawai, Taketoshi Hanawa,
et al, 40 pp.
JAPANESE, rpt, Report No 66 of the National
Aeronautics and Space Engineering Research
Institute, Japan, pp 1-40.
Dept of Navy Tr 4355/ONI 2011

Fuels & Propulsion

Origination of Condensations in
Supersonic Flows of Rarefied Gases, by
A. A. Pomerantsev, 8 pp.
RUSSIAN, per, Inzhenerno-Fiz Zhur,
No 8, 1964, pp 59-63. 9698195
FTD-TT-65-621

Three-Dimensional Flow of Ideal Gas
Past Smooth Bodies (Cones), by
K. I. Babenko, et al.
RUSSIAN, per, Izdatel'stvo Nauka, Moscow,
1964, 508 p.
*NASA TT F-380

Protection of Titanium Alloys Against
High-Temperature Gas Corrosion,
by Yu. A. Pan'kov, O. P. Golub.
RUSSIAN, per, Iz VUZ Chernaya Metallurgiya,
No 2, 1965, pp 118-124.
*FTD-TT-65-1956

Fillers as Components of Thickened Lubricants,
by I. G. Fuks, V. V. Vaynshtok, et al.
RUSSIAN, per, Khim i Tekh Topliv i Masel,
No 7, 1964, pp 59-65.
*FTD-TT-65-1844

Scientific
Fuels & Propulsion (Contd)

Filtration of Jet Fuel at the Airfield,
by V. N. Zrelov, et al.
RUSSIAN, per, Nefteprozrabotka i Neftekhimiya,
No 5, 1964, pp 20-22.
*FTD-TT-65-1904

Analytic Filters of Organic Microfibers
and Their Use in Determining the
Concentration of Aerosols and Dust
by K. Spurny, M. Polydorova, et al.
CZECH, per, Pracovní Lékařství, Vol XIV,
No 8, Oct 1962, pp 369-375. 9230447
AEC-ORNL-Tr-779

Structure of Solid-fuel Boosters,
by C. Attali, G. Jube.
FRENCH, per, Doc-Air-Espace, No 92, 1965,
pp 33-44.
*Dept of Navy/APL No J-683

Measurement of Gas-amplification in Methane
at Low Pressures by means of a Transmission
Proportional Counting Tube for Fission
Production, by H. J. Specht, et al.
GERMAN, per, Nukleonik, Vol 7, No 1,
1965, pp 8-14.
*AEC
EDC 30 Jan 1966

Hydrogen of Alkali and Kardi Oil,
by M. Radnot.
HUNGARIAN, per, Kulonlenyomat a
Szemeszet, No 1, 1957, pp 7-9.
*FTD-TT-65-1866

Analyses of Para Ortho Hydrogen and
by Gas Chromatography, by Katsuyoshi Fujita
Takao Kwan.
JAPANESE, per, Bunseki Kagaku, Vol XII,
1963, pp 15-19. 9230470
AEC-NP-Tr-1289

Numerical Solutions of Some Problems in
Gas Flow, by P. I. Chushkin.
POLISH, per, Archiwum Mechaniki Stosowanej,
Vol 16, No 3, 1964, pp 577-596.
*FTD-TT-65-1826

Scientific
Materials & Metallurgy

Industrial Application of Ultrasonic
Degassing of Aluminum Alloys, by
G. I. Eskin, V. I. Slotin, 7 pp.
RUSSIAN, per, Alyuminiyevyye Splavy,
No 1, 1963, pp 139-149. 9698214
FTD-TT-65-982

Splitting of Dislocations in B.C.C.
Metals on 110 Plane, by F. Kroupa,
V. Vitck.
RUSSIAN, per, Chekhoslovatskiy Fizicheskiy
Zhur, Vol XIV, No 5, 1964, pp 337-346.
*FTD-TT-65-1839

Designs of Electron Melting Units, by
G. F. Zaboronok, T. I. Zelentsov, etc.,
64 pp.
RUSSIAN, bk, Elektronnaya Plavka Metallov,
Moscow, Metallurgical publishing House,
1965, pp 63-125.
JPRS 32,968

Diffused Zircaloy-2 Stainless Steel Junc-
tions, by Francois Jacques.
FRENCH, rpt, 1965. CEA-R-2634. 9230597
AEC-Tr-6612

Diffusion Cladding of Metals,
by G. V. Samsonov, ed.
RUSSIAN, bk, Diffuzionn'ye Pokr'tiya ni
Metallakh.
*CB

Combination of Plastics With Metal,
by I. Al'shits.
RUSSIAN, per, Ekon. Gazeta, 3 Feb 1965, 20.
*BISI 4550

Measurements of the Electron Temperature
in Cesium low Voltage Arc, by
Yu. K. Gus'kov
A. I. Kiryushchenko.
RUSSIAN, rpt, Gosudarstvennyy Komitet po
Ispol'zovaniyu Atomoy Energii SSSR,
Fiziko Energeticheskiy Institut, 1965,
pp 1-8.
*FTD-TT-65-1969

Ablation of Metallic Bodies Near the Stagnation
Point, by B. I. Reznikov, 8 pp.
RUSSIAN, per, Inzhenero-Fizicheskiy Zhurnal,
Vol VIII, 1965, pp 93-97, 9230419.
AEC SC-t-65-758

Scientific
Materials & Metallurgy (Contd)

The Fusion of a Metal Body in the
Vicinity of Critical Point, by
B. I. Reznikov, 9 pp.
RUSSIAN, per, Inzhenero-Fiz Zhur,
Vol VIII, No 1, 1965, pp 93-97.
9698653
FTD-TT-65-866

Spectral Emissivity of some Technical Alloys
in the Infrared Spectrum Range,
by V. V. Lebedeva.
RUSSIAN, per, Iz Ak Nauk SSSR, Metal i Gornoye
Delo, No 4, 1964, pp 143-146.
*FTD-TT-65-1796

Research in the Field of Refractory and
Hard Compounds, by G. A. Meyerson.
RUSSIAN, per, Iz AN SSSR, Neorganicheskiye
Materialy, Vol I, No 1, pp 16-28, 1964.
9230474
AEC-Tr-6616

Studying the Process of Titanium Carbide
Formation Precipitated From Gaseous Phase,
by V. P. Yelyutin, G. I. Pepekin, et al,
11 pp.
RUSSIAN, per, Iz VUZ Chernaya Metallurgiya
No 3, 1964, pp 124-130. 9698502
FTD-TT-65-738

The Effect of Lubricants on the Cold Rolling
of Thin Strips and Belts, of VT-14,
VT-15, and VT-16 Titanium Alloys,
by I. M. Pavlov, S. F. Burkhanov.
RUSSIAN, per, Iz VUZ Chernaya Metallurgiya,
No 9, 1964, pp 88-94.
*FTD-TT-65-1955

Cathodic Polarization on Precipitation of
Tin-Manganese Alloy From Halide Solutions,
by A. V. Izmailov, et al.
RUSSIAN, per, Izv. VUZ Khim. i. Khim.
Tekh., Vol 7, No 2, 1964, pp 269-273.
*BISI 4552

Chlorination of Vanadium-Containing
Converter Slag on an Industrial Scale,
by S. A. Amirova, et al.
RUSSIAN, per, Izv. VUZ Tsvet. Met., Vol 3;
No 2, 1965, pp 79-84.
*BISI 4568

Scientific
Materials & Metallurgy (Cont'd)

Method of Constructing a High-Quality Automatic Control System for Metallurgical Objects with a Lag, by V. A. Ivanov, D. I. Lisovskiy and M. R. Shapirovskiy, 9 pp.
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya Metallurgiya, No 4, Jul-Aug 1965, pp. 145-151.
JPRS 33008

Mathematical Analog of the Reduction Process of Metal Using Carbon Fuel from Liquid Slag, by D. I. Lisovskiy and V. M. Tashevskaya, 12 pp.
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya Metallurgiya, No 4, Jul-Aug 1965, pp. 152-161.
JPRS 33008

Use of Eddy Current Method For Measuring Stresses in Metals, by M. M. Schel'
RUSSIAN, per, Khimicheskoye i Neftymoye Mashinostroyeniye, No 4, 1964, pp 35-37.
*FTD-TT-65-1892

The Nature of Plastic Deformation at Super High Velocities, by Kh. Kortenski, I. Buchvarov.
RUSSIAN, per, Mashinostroyeniye, No 12, 1964, pp 29-32.
*FTD-TT-65-1877

New Physical and Chemical Methods of Precision Machining, by A. L. Livshits, 23 pp.
RUSSIAN, per, Mashinostroitel', No 6, Jun 1965, pp 11-17.
JPRS 32,787

Increasing the Ductility of Stainless Steels using Rare Earth Elements, by N. F. Nakonechnyy.
RUSSIAN, per, Metal i Gornorud Prom, Ak Nauk SSR Inst Tekh Informat, No 1, 1964, pp 32, 33.
*FTD-TT-65-1787

Embrittlement of Ferritic-Austenitic and Ferritic Stainless Steels, by A. P. Gulyayev, E. G. Feld'gandler, et al.
RUSSIAN, per, Metal Term Obrabotka Metal, No 3, 1965, pp 41-44. 9230569
AEC-ORNL-Tr-799-A

Scientific
Materials & Metallurgy (Cont'd)

Heat Resistance of Glass Fabric Filled Plastics, by G. A. Yakovlev.
RUSSIAN, rpt, Nauchnaya Soveshchaniye po Teplovym Napryazheniyam v Elementakh Konstruktsiy 4th, 1964, pp 329-338.
*FTD-TT-65-1916

Optical Density and Thickness of Evaporated Carbon Layers, by K. Graff.
RUSSIAN, per, Optik, Vol 18, 1961, pp 120-129.
*AEC
EDC - 30 Jan 1966

Optical-Mechanical Industry.
RUSSIAN, per, Optiko-Mekhanicheskaya Promyshlennost' No 6, 1963, pp 1-40.
*FTD-MT-65-S75

Physicomechanical Antifriction Properties of Teflon Materials, by S. N. Ganz, et al
RUSSIAN, per, Plasticheskiye Massy, No 8, 1964, pp 28-31.
*FTD-TT-65-1895

Selection and Application of Silicone Fluids to Decrease the Adhesion of Plastics to Solid Surfaces, by L. M. Vinogradova, A. Ya. Korolev, 7 pp.
RUSSIAN, per, Plasticheskiye Massy, No 9, 1964, pp 18-20. 9698626
FTD-TT-65-909

Phase Equilibria in the System Zirconium-Molybdenum-Carbon, by T. F. Fedorov, Yu. B. Kuz'ma, et al.
RUSSIAN, per, Poroshkovaya Metallurgiya, No 3, 1965, pp 69-73.
*AEC

Phase Equilibria in the System Zirconium-Chromium - Carbon, by T. F. Fedorov, Yu. B. Kuz'ma.
RUSSIAN, per, Poroshkovaya Metallurgiya, No 3, 1965, pp 75-79.
*AEC

An All-Metal Mercury Vapor Unit in which A $4 \cdot 10^{-12}$ mm Can be Achieved, by A. B. Tseytlin, 13 pp.
RUSSIAN, per, Pribery i Tekhnika Eksperimenta, Vol 10, No 5, Sept-Oct 1965, pp. 177-182.
JPRS 33178

Scientific
Materials & Metallurgy (Contd)

On the Method of Testing Metals at High Pressure and High Temperature, by M. L. Horb.
RUSSIAN, per, Prikladnaya Mekhanika, Vol 10, No 5, 1964, pp 547-551.
*FTD-TT-65-1887

Coating a Metal With Plastic Film, by Sh. Shleymovich.
RUSSIAN, per, Rechnoy Transport, No 10, 1964, pp 29-30.
*FTD-TT-65-1878

The Connection Between the Kinetics of Recrystallization and the Relaxation of Stresses in Metals, by L. N. Alexandrov, V. N. Orlov.
RUSSIAN, per, Sb Relaksats, Yevleniya v Met i Splavakh, 1963, pp 294-299.
*FTD-TT-65-1872

Strain Gates made of Extremely Thin Metallic Foil, by V. Bin.
RUSSIAN, per, Sbornik Vysokotemperat Tenzodat, 1963, pp 125-133.
*FTD-TT-65-1871

Tenth Anniversary of the Cherepovets Metallurgical Plant, by A. I. Borodulin, 7 pp.
RUSSIAN, per, Stal', No 8, Aug 65, pp 673-675.
JPRS 32,664

Extraction of Metal Compounds With Pyrazoline Dithiocarbamates, by V. M. Byr'ko.
RUSSIAN, per, Trudy Komissii po Analiticheskoy Khimii, Akad Nauk SSSR, Vol XIV, 1963, pp 191-201.
*NASA TT F-417

Electrical Transfer of Silver in Liquid Lead and of Cobalt in Liquid Tin, by P. P. Kuz'menko, E. I. Kharkov, et al., 10 pp.
RUSSIAN, per, Ukrainskiy Fizichmiy Zhurnal, Vol IX, No 8, 1964, pp 881-889, 9230407.
AEC IS-trans-19

Scientific
Materials & Metallurgy (Contd)

Physical Metallurgy of Titanium, by I. I. Kornilov, 351 pp.
RUSSIAN, bk, Works of the Fifth Conference on Metallurgy, Physical Metallurgy, And Application of Titanium and Its Alloys, Mar 1963, A. A. Baykov Institute of Metallurgy, Moscow, 1964. 9230372-V
NASA TT F-338

Shipbuilding Steel - Chapter II, by A. M. Veingarten, et al.
RUSSIAN, Leningrad, 1962, pp 56-96.
*BISI 4558

Some Problems in Elastic-Plastic Vibration of Rods, by A. I. Buravtsev.
RUSSIAN, per, Vest Lenin Univ. Ser Mate, Mekh i Astron, No 1, 1965, pp 77-83.
*FTD-TT-65-1830

Controlling the Carbon Concentration of Iron-Carbon Alloys by the Optical Spectrographic Method Without Taking Samples, by A. B. Shaeovich, S. I. Mel'nikov, et al.
RUSSIAN, per, Zavods, Lab., No 2, 1965, pp 169-172.
BISI 4441

Bulgaria -- An Exporter of Nonferrous Metals, by Petur Antov, 5 pp.
BULGARIAN, per, Vunshna turgoviya, No 9, Sep 1965, pp 6-9
JPRS 33076

Short Wing Theory and its Application to the Ship Rudders, by Liu, Ying-Chung, Shen, Hung-Ts'ui.
CHINESE, per, Chung'kuo Tsao Ch'uan, No 2, 1964, pp 37-44.
*FTD TT-65-1853

Means of Improving Corrosive Resistance of Alloys, by Ch'en Chun-ming (7115 0193 2494), 21 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 9, 20 Sept 1965, pp. 799-804.
JPRS 33046

Excitation of Spin Waves During Ferro-Magnetic Resonance, by J. Loos.
CZECH, per, Chekhoslovatskiy Fizicheskiy Zhurnal, Vol 14, No 7, 1964, pp 501-509.
*FTD-TT-65-1840

Scientific
Materials & Metallurgy (Contd)

The Affect of Hot-and Cold-rolling Conditions and of Annealing on the Properties of Low Carbon Deep Drawing Strip Steel, by J. Dedek.
CZECH, per, Hutn. Listy, Vol 20, No 4, 1965, pp 252-261.
*BISI 4566

Contribution to the Study of Ageing of Corrosion-Resistant Steels of the Type Cr18Ni9Ti, by Karel Lobl, Hanus Tuma, et al.
CZECH, per, Kovove Materialy, Vol II, No 5, 1964, pp 433-444. 9230476
AEC-ORNL-Tr-795

A Statistical and Metallographic Study of the Mechanical Properties of Malleable Ferrite Cast Iron, by A. M. Gupta.
CZECH, per, Slevarenstvi, Vol 12, No 8, 1964, pp 316-318.
*FTD-TT-65-1823

Determination of Temperature Distribution in Solidifying Steel Ingots by Means of Numerical Computation, by C. L. Bijl, F. Hollander.
DUTCH, per, De Ingenieur, Vol 76, No 16, 1964, pp 65-73.
BISI 4305

The Use of Dry-oil Burners in Open-Hearth Furnaces at Cockerill-Ougree, by J. Levaux, E. Denis.
FRENCH, per, C.N.R.M., Jan 1965, pp 19-25.
BISI 4307

The Progress of Ingot Solidification, by P. Vallet.
FRENCH, per, Centre d'Etudes Sider., Cahiers du Cessid, 1964, Metz, 55.
BISI 4440

A Contribution to the Study of the Measurement of the Work Hardening and Anisotropy Characteristics of Dead Soft Steel Sheets, by G. Jegaden, et al.
FRENCH, rpt, International Deep Drawing Research Group Conference, London, Jun 3 & 5 1964, pp 5.
BISI 4108

Scientific
Materials & Metallurgy (Contd)

Special Aspects of Safety Problems in Steelworks Transport and Handling Departments, by Derosier.
FRENCH, rpt, Paper Presented at the International Steelworkers Transport Conference at Dusseldorf, 1965, 39.
*BISI 4564

Information Needed by the Head of the Transport Department in Order to Control and Run His Organisation Under the Best Possible Conditions, by M. Rieusset.
FRENCH, rpt, Paper Presented at the International Steelworks Transport Conference at Dusseldorf, 1965, 13.
*BISI 4564

Mechanisation and Automation of Transport and Materials Handling,
FRENCH, rpt, Paper Presented at the International Steelworks Transport Conference at Dusseldorf, 1965, 12
*BISI 4565

Magnetic Investigations on Mixed Crystals of Pd and Transition Elements, by D. Gerstenberg.
GERMAN, per, Ann. Phys. Series 7, Vol 2, No 5-6, 1958, pp 236-262.
*AEC
EDC 30 Jan 1966

State of Stress and Multiaxial Indices in Notched Tensile and Bend Test Pieces With Elastic Stressing, by A. Kochendorder, A. Schurenkamper.
GERMAN, per, Arch. Eisenh. Vol 32, Oct 1961, pp 681-687.
BISI 4314

The Production of Hot-Rolled Strip, by H. Winterkamp.
GERMAN, per, Bänder Bleche Rohre, Nov 1960, pp 105-111.
BISI 4330

Theories of Cathode Drop, by E. Hantzsch.
GERMAN, per, Beitr. Plasma Physik, Vol 1, 1960-1961, pp 179-201.
*BISI 4553

Scientific
Materials & Metallurgy (Contd)

Purchasing Procedure for Cold Rolled Strip and Sheet, by G. Frank.
GERMAN, per, Blech, Vol 11, Nov 1964, pp 563-650.
BISI 4317

New Protective and Decorative Coatings for Sheets, by E. Meckelburg.
GERMAN, per, Blech, Vol 12, Jan 1965, pp 6-11.
*BISI 4553

Plate Thickness Measurement Using Radio Nuclides, by A. Kosmowski.
GERMAN, Blech, Vol 12, Feb 1965, pp 55-56.
*BISI 4557

Determining the Life of Rheinmetall Tubes For the 20 mm Hispano Suiza 820 Automatic Cannon, by Bullinger, Mandalka. 11 pp.
GERMAN, rpt, Ermittlung der Rohrlebensdauer Von Rh.-Rohren fur MK 20 mm HS 820, 2 June 1961, 1-13.
ACSI I-8954-A
ID 2204066765

Square-run Gears for Transporters, by B. Topfer.
GERMAN, per, Fordern Heben, Vol 15, Feb 1965, pp 89-99.
*BISI 4551

Selection of Switch Gear for Mains Frequency Induction Furnace Installations, by A. Potthof.
GERMAN, per, Giesserei-Praxis, No 8, 1964, Apr 25, pp 149-154.
BISI 4280

Strength and Deformation Properties of "Ordinary Structural Steel" Plates in the Thickness Direction, and the Importance of These Properties in Welded Structures, by D. Nagel, W. Schonherr.
GERMAN, per, Materialprufung, Vol 6, Sep 1964, pp 301-307.
BISI 4299

Scientific
Materials & Metallurgy (Contd)

The Problem of the Energy Balance in Stationary and Pulse Modulated High Temperature Argon Arcs, by W. Neumann.
GERMAN, per, Monatbericht der Deutschen Akad. Wissen, No 546, 1961, pp 260-263.
*BISI 4567

Safety in Transport and Handling Operations, by A. Plattig.
GERMAN, rpt, Paper Presented at the International Steelworks Transport Conference at Dusseldorf, 1965.
*BISI 4562

The Notch Effect in Glass Fiber Reinforced Plastics, by W. Felde.
GERMAN, per, Plaste und Kautschuk, Vol 11, No 10, pp 609-613.
*FTD-TT-65-1842

Identification of Kink Bands in Plastically Deformed Lamellar Pearlite, by M. Proger.
GERMAN, per, Praktische Metallographie, Vol 1, No 4, 1964, pp 138-140. 9230432
AERE-Trans-1035

Some Results of Hot Torsion Tests on Basic Bricks, by A. Starzacher.
GERMAN, per, Radex Rund., No 5, 1964, pp 299-312.
BISI 4453

Automation on Blast Furnace Operations - II, by H. Huck.
GERMAN, per, Regelungstechnik Praxis, Vol 6, No 2, 1964, pp 60-68.
*BISI 4447 Pt 2

Tube Life of Ionitrided Tube No 31 226 for the 20 mm Hispano Suiza 820 Automatic Cannon, Technique by Berghaus/Rheinmetall, by Ing. Spangenberg, Mandalka, 9 pp.
GERMAN, rpt, Rohrlebensdauer eines nach Berghaus/Rheinmetall Ionitrierten Rohres Nr. 31 226 fur MK 20 mm HS 820. 14 Dec 1961, 1-11.
ACSI I-8954-B
ID 2204066765

Foamed Glass - I, by M. Moscher.
GERMAN, per, Silikattech., Vol 5, 1954, pp 243-247.
*BISI 4570

Scientific
Materials & Metallurgy (Contd)

Foamed Glass - II, by E. O. Schulz.
GERMAN, per, Silikattech., Vol 5, 1954,
pp 343-346.
*BISI 4571

The Problem in the Automation of the
Oxygen Blowing Process - II. Development
of Mathematical Models for the Oxygen
Blowing Process and First Results, by
E. Kapfer.
GERMAN, per, Stahl und Eisen, Vol 85,
25 Mar 1965, pp 331-341.
*BISI 4457 Pt 2

Calculation of Coolant for the Basic
Oxygen Process With Pig Iron Low and
Rich in Phosphorus, by H. vom Ende,
W. D. Liestmann.
GERMAN, per, Stahl Eisen, Vol 85,
25 Mar 1965, pp 342-353.
BISI 4378

Progress and Problems in Metallurgical
Dust-Collecting Plants, by H. Weineck.
GERMAN, per, Staub, Vol 24, Nov 1964,
pp 475-485.
*BISI 4569

Crash Barriers - Safety Rails for Roads,
by K. Idleberger.
GERMAN, per, Strassenbau, Vol 55,
May 1964, pp 368-371.
*BISI 4572

Steel Sheet Roads Prove Themselves.
GERMAN, per, Strassenbau, Vol 55
May 1964, pp 372.
*BISI 4573

A Newly Developed Compound - Cast Steel
for Wear Exposed Installations, by
A. Harnisch, et al.
GERMAN, per, Werks. Korros., Vol 16,
Mar 1965, pp 185-189.
*BISI 4554

Repetition of Tube Life Firing Tests on a
Nitrided and Hard Chromium Plated Tube for the
20 mm Hispano Suiza 820 Automatic Cannon,
by Ing. Spangenberg, VA (t) Mandalka, 14 pp.
GERMAN, rpt, Wiederholung des Rohrlebens-
dauerbeschusses eines Nitrierten und
Hartverchromten Rohres für MP mm HS 820
(Test Report), 20 Oct 1961, pp 1-14.
ACSI I-8954C
ID 2204066765

Scientific
Materials & Metallurgy (Contd)

On the Physics of the Shaping of Metal
With High Magnetic Field Pulses, by
H. J. Lippmann, H. Schreiner,
GERMAN, per, Zeit für Metallkunde,
Vol LV, No 12, 1964, pp 737-740. 9230440
AEC-NP-Tr-1284

The Start of Precipitation From
Supersaturated Solid Solutions,
by Erhard Hornbogen
GERMAN, per, Z. Metallkde, Vol LVI,
No 3, 1965, pp 133-154. 9230481
AEC-ORNL-Tr-637

Occurrence of Steam Jets in Carbon Arcs
With High Current, by R. Wienecke.
GERMAN, per, Zeitschrift für Physik,
No 151, 1958, pp 159-173.
*BISI 4574

The Oxidation Speed of Zinc Alloys,
by C. Gensch, K. Hauffe.
GERMAN, per, Zeit für Physik Chemie,
No 196, 1950, pp 427-437.
*FTD-TT-65-1908

Rolling Torque and Rolling Pressure,
by A. Geleji, 8 pp.
HUNGARIAN, per, Academia Scientiarum
Hungaricae, Acta Technica, Vol XLV,
No 1, 1964, pp 275-281. 9698356
FTD-TT-65-235

Problems of Rolling Modern I and U Beams,
by G. Devenyi.
HUNGARIAN, per, Koh. Lapok, Vol 97,
Dec 1964, pp 552-557.
BISI 4434

The Role of Tin-Bronze Alloys With
Two or More Components in Bearings,
by K. Marechal, 18 pp.
HUNGARIAN, per, Ontode a Kohaszati
Lapok Melleklote, Vol XV, No 1, 1964,
pp 10-15. 9698627
FTD-TT-65-563

Technology of Liquid Metals, by H. Wesley
Savage, S. Moretti.
ITALIAN, rpt, 1965.
AEC-ORNL-Tr-854

Scientific
Materials & Metallurgy (Contd)

Information Needed by the Head of the Transport Department in Order to Control and Run his Organisation Under the Best Conditions, by Cervo.

ITALIAN, rpt, Paper Presented at the International Steelworks Transport Conference at Dusseldorf, 1965.

*BISI 4560

Steelworks Transport and Materials Handling: Vutomation in Transport and Raw Materials Preparation Plant in Finsider's Four Steelworks, by M. Bucchi.

ITALIAN, rpt, Paper Presented at the International Steelworks Transport Conference at Dusseldorf, 1965.

*BISI 4562

A Method of Refining of Uranium Ore in Japan, by Hideo Kinoshita.

JAPANESE, per, FAPIG, Vol 27, No 2, pp 121-127, 1963 9230198
AEC NSJ-Tr-8

Some Problems on the Lining of a Large Electric Steelmaking Furnace, by H. Hirayama.

JAPANESE, per, Harima Refractories Co. Ltd., Techn. Rept., No 7, 1964, pp 808-811.

*BISI 4556

On the Properties of Powdered and Massive UO_2 and U_2O_3 , by Tsuyoshi Amanuma, Kazuo Sakamoto, 13 pp. 49

JAPANESE, per, J. Japan Soc. Powder Met., Vol X, No 5, 1963, pp 198-203, 9230414.
AEC NSJ-tr-16

Development of Bonding Methods for Graphite Materials,

JAPANESE, rpt, Japan Atomic Energy Research Institute Report JAERI 1071, Feb 1965. 9230443

AEC-ORNL-Tr-670

Shrinkage of Powder Compacts During Sintering, by Teruichiro Kubo, Kiichi Shinriki, et al., 14 pp.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol LXI, 1958, pp 918-922, 9230406.

AEC IS-trans-20

Scientific
Materials & Metallurgy (Contd)

The Changes in Specific Surface Area of Iron Salts, and Iron Oxide Powders by Heating, by A. Moriyama, J. Moriyama, et al.

JAPANESE, per, Nippon Kinzoku, Vol 24, No 11, 1960, pp 699-703.

BISI 4334

Measurement of Change of Porosity and Pore Distribution of Iron Oxides During Reduction With Co Gas, by M. Tokuda.

JAPANESE, per, Tetsu to Hagane, Vol 50, Sep 1964, pp 1626-1629.

*BISI 4559

Polish-Produced Plastics Used as Substitutes for Non-ferrous Metals, by Henryk Halas, 12 pp.

POLISH, per, Gospodarka Materialowa, No 17, Sept 1965, pp 599-601

JPRS 33125

Polish-Produced Plastics Used as Substitutes for Non-Ferrous Metals, by Henryk Halas, 13 pp.

POLISH, per, Gospodarka Materialowa, No 18, Sep 1965, pp 635-637

JPRS 33125

Tensile Strength of Steel at High Temperatures, by G. Wallquist.

SWEDISH, per, Jernkont. Ann. Vol 146, No 2, 1962, pp 53-80.

BISI 4028

Scientific
Mathematics & Data Processing

On Differential Equations with Unbounded Operators in Banach Spaces, by P. E. Sobolevskiy. RUSSIAN, per, Dok Ak Nauk SSSR, Vol III, No 1, 1956, pp 19-22.

*Dept of Navy/NRL

A Differential Equation of a Disc with an Asymmetrical Profile, by Yu. M. Shevchenko. RUSSIAN, per, Dopovidi Ak Nauk Ukrain RSR, No 2, 1965, pp 180-184.
*FTD-TT-65-1949

Application of Digital Computers for Aerotriangulation, by A. N. Lobanov, 22 pp. RUSSIAN, per, Geodeziya i Kartografiya, No 11, 1958, pp 29-42. 9698511
FTD-TT-65-380

On an Estimate of Distribution Parameters, by I. Sh. Brankhalilov. RUSSIAN, per, Iz AN AZERBSSR Seriya Fiziko-Tekhnicheskikh i Matematicheskikh Nauk No 2, 1964, pp 31-31.
*FTD-MT-65-571

On a Differential-functional Equation in Partial Derivatives, by V. R. Petukhov. RUSSIAN, per, Iz VUZ, Matemat, No 1(38), 1964, pp 96-99.
Dept of Navy Tr 4337 /APL No T-1480

Criteria for the Boundedness of Solutions of Systems of Ordinary Differential Equations, by I. M. Vlasov. RUSSIAN, per, Iz VUZ, Matemat, No 3(40), 1964, pp 1964.
Dept of Navy Tr 4351/APL No T-1515

A Direct Method of Solving Integral Equations, by B. G. Gabdulkhayev. RUSSIAN, per, Iz VUZ, Matemat, No 3, 1965, pp 51-60.
*Dept of Navy/APL No J-696

Uniqueness of the Solutions of Integral Volterra Equations with a Delaying Argument, by A. I. 'ogomov, Z. B. Tsalyuk. RUSSIAN, per, Matemat Sbornik, Vol LXVII, No 2, 1965, pp 303-309.
*Dept of Navy/APL No J-698

Scientific
Mathematics & Data Processing (Contd)

Numerical Calculation of Flow Around a Flared Cone, by G. S. Rosliakov, N. V. Drozdova. RUSSIAN, per, Moscow, Universitet. Vychislitel'nyi Tsent. Sbornik Rabot, No 2, pp 61-75.
RAND Corporation

Use of the Method of Averaging to Solve a Partial Differential Equation Encountered in Vibration Theory, by O. A. Zhaitykov. RUSSIAN, bk, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, 1964, pp 52-61.
*FTD-TT-65-1917

Certain Methods of Linearization and Approximate Solution of Nonlinear Functional Equations by B. A. Vertgeim. RUSSIAN, per, Sibirsk Matemat Zhur, Vol VI, No 3, 1965, pp 686-691.
*Dept of Navy/APL No J-702

Computing Machines and Calculation of Installations, by A. V. Gemmerling. RUSSIAN, per, Stroitel'naya Mekhanika i Raket Sooruzheniy, No 3, 1963, pp 1-4.
*FTD-TT-65-1966

Asymptotics of Certain Functionals in Boundary Problems of a Two-Dimensional Random Straying, by V. S. Korolyuk, 6 pp. RUSSIAN, per, Trudy Inst Matemat, Ak Nauk UzSSSR, 1963, pp 43-48. 9698619
FTD-TT-65-675

Mathematical Conditions of Physical Realization in Automatic and Gyroscopic Systems, by S. A. Babushkin. RUSSIAN, per, Trudy Soveshchaniya Vsesoyuznoye Soveshchaniye Po Teorii Invariantnosti i Yeye Primeneniyu V Avtomaticheskikh Sistemakh, 2D, Kiev. 1962. Teoriya Invariantnosti V Sistemakh Avtomaticheskogo Upravleniya, 1964, pp 65-83.
*FTD-MT-65-565

Principle of Averaging in Nonlinear Mechanics as Applied to Computational Systems of Equations, by O. A. Zhaitykov, 5 pp. RUSSIAN, per, Ukrains Matemat Zhur, Vol XVII, No 1, 1965, pp 39-46.
*Dept of Navy/APL No J-695

Scientific
Mathematics & Data Processing (Contd)

On the singularity of the solution of
Cauchy's Problem for a System for Partial
Differential Equations, by N. N. Chaus.
RUSSIAN, per, Ukrains Matemat Zhur, Vol XVII,
No 1, 1965, pp 161-166.
*Dept of Navy/APL No J-691

All-Union Conference on Computer
Mathematics, by N. S. Bakhvalov,
A. N. Tikhonov.
RUSSIAN, per, Uspekhi Matemat Nauk,
Vol XX, No 3, 1965, pp 254-255.
*FTD-TT-65-1807

Numerical Solution of the Cauchy Problem for
Linear Second-order Equations of Parabolic
Type, by V. G. Sragovich.
RUSSIAN, per, Zhur Vychisl Mate i Mate Fiz,
Vol IV, No 3, 1964, pp 592-596.
Dept of Navy Tr 4335/APL No T-1474

The Triple Impulse, Excerpt: Asymptotic
Paths, by Carl Ludwig Siegel.
GERMAN, per, Annals of Mathematics,
Vol XLII, Excerpt: Section II, pp 156-162,
1941. 9230459
AEC-SC-T-65-749

On the Computation of Flow at Large Knudsen
Numbers, by M. M. Kogan.
GERMAN, per, Astronautica Acta, Vol XI, No 1,
1965, pp 36-42.
*FTD-TT-65-1959

Organizational Problems of Tonometry,
by G. Strobl.
GERMAN, per, Klinische Monatsblaetter fuer
Augenheilkunde, Vol CXL, No 6, 1962, 1962,
pp 801-813.
Dept of Navy Tr 4339/APL No T-1488

Error Estimates in Relaxation Methods for the
Numerical Solution of Linear Systems of
Equations, by J. Albrecht.
GERMAN, per, Numerische Mathematik, Vol III,
1961, pp 188-201.
Dept of Navy Tr 4340/APL No T-1488

Scientific
Mathematics & Data Processing (Contd)

A New Interpretation of the Mathematical
Interrelationships of Radioactive Decay,
by M. Wolfke.
GERMAN, per, Physik Ztschr, Vol XXX,
1929, pp 899-901. 9230462
AEC-ORNL-Tr-707

On the Resonance Concept in systems of
Linear and Nonlinear Ordinary Differential
Equations, by Rahmi Ibrahim Ibrahim Abdel
Karim, 173 pp.
GERMAN, bk, Über den Resonanzbegriff bei
Systemen Linearer und Nichtlinearer Gewohn-
licher Differentialgleichungen, Doctoral
Dissertation, Tanta, Egypt, 1963. 9230381-V
NASA TT F-300

Formulas for transforming Spherical Functions
when the Coordinate System Changes Linearly,
by Ad. Schmidt.
GERMAN, per, Z fuer Mathematische Physik,
Vol XLIV, 1899, pp 327-338.
*Dept of Navy/APL No J-681

Almost-Periodical or Limited Solutions
of Differential Nonlinear Almost-Periodical
or Limited Systems, by Luigi Amerio.
ITALIAN, per, Annali di Matematica Pura
ed Applicata, Vol XXXIX, Ser 4, pp 97-119,
1955. 9230453
AEC-SC-T-65-752

Scientific
Nuclear Sciences & Technology

Sources of Gamma-Radiation for Radiation-Chemical Installations, by A. Kh. Breger. RUSSIAN, rpt, 7 Apr 1965. 9230541
AEC-Tr-6570

Investigation of Controlled Nuclear Fusion and High-Temperature Plasma Physics, by L. A. Artsimovich, 23 pp. RUSSIAN, per, Atomnaya Energiya, Vol XVII, No 4, 1964, pp 269-278. 9698233
FTD-TT-65-961

Dependence of the Separation Factor in Isotope Exchange on the Properties of the Exchanged Molecules, by A. M. Rozen, A. I. Mikhailichenko. RUSSIAN, per, Atom Energ. USSR, Vol XVIII, No 2, 1965, pp 147-156. 9230466
AEC-ORNL-Tr-770

Nuclear Rocket Engine, by A. P. Yermakov, A. G. Syrmay, 8 pp. RUSSIAN, per, Atomnaya Energiya i Transport, 1963, pp 114-121. 9698621
FTD-TT-65-943

The Topology Change of the Fermi Surface in Thallium by Effects of Impurities, by B. G. Lazarev, et al. RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol 163, No 1, 1965, pp 74-75.
*AEC 2281

A Unified Multichannel Telemetering System For the Study of Nuclear Radiations, by A. A. Bragin, R. F. Fedoriv. RUSSIAN, per, Fiziko-Mekhanicheskiy Institut, Voprosy Peredachi Informatsii AN UKR SSR, No 3, 1964, pp 118-121.
*FTD-TT-65-1889

Optimal Form of Triangular Radiating Fins Taking Into Account the Mutual Irradiation of the Fins and the Cooled Surface, by Yu. A. Vassanov, Yu. G. Zhulev. RUSSIAN, per, Iz An SSSR, Energetika i Transport, No 3, 1964, pp 391-400.
*FTD-TT-65-1929

Scientific
Nuclear Sciences & Technology (Contd)

Radiation Phenomena in Ionic Crystals, by K. Shvarts, RUSSIAN, per, Iz AN LATSSR, No 4, 1964, pp 30-37.
*FTD-TT-65-1734

On the Amplitude of Inelastic Scattering of Fast Particles by Nuclei, by I. Zh. Petkov. RUSSIAN, rpt, Joint Institute For Nuclear Research, Dubna, Report No-P-2037, 9230439
AEC-NP-Tr-1283

Development of Radioactive Halos in Biotite, by Gunther Hoppe, RUSSIAN, per, L'vov, Geol Obshch Mineralog Sbornik, No 16, 1963, pp 328-333. 9230480
AEC-ORNL-Tr-642

Radiation Spectra of a Detonating Wave in Nitromethane, by A. N. Dremin, S. D. Savrov, 5 pp. RUSSIAN, per, PMTF, No 1, Jan, Feb 1965, pp 103-105.
Dept of Navy Tr 4328/ONI 2004

Study of the Properties of Fast-Moving Plasma Bursts, by V. E. Demichev. RUSSIAN, rpt, State Committee on the Use of Atomic Energy USSR, Institute of Atomic Energy im. I. V. Kurchatov, Moscow, 1964. 9230429
AEC-Tr-6589

General Rules for the Formation of Crystalline Structures and Elements as Dependent on the Electronic Structure of Their Atoms, by V. M. Karashchuk. RUSSIAN, per, Trudy Inst Inzhenerov Zheleznodor Transporta, No 165, 1963, pp 16-51.
*FTD-MT-65-583

Model of the Quantum Theory of a Field With n Fixed Fermions, by V. A. Gorodtsov, 9 pp. RUSSIAN, per, Vest Mosk Univ, Ser II Fiz, Astron, No 3, 1963, pp 75-80. 9698620
FTD-TT-65-929

Scientific
Nuclear Sciences & Technology (Contd)

The Use of Ultrashort Wave Radio Stations for the Transmission of Information, by P. P. Belogrivtsev. RUSSIAN, per, Vest Prot Oborony, No 4, 1964, pp 39-41.
*FTD-TT-65-1816

Method Of Determining Aerodynamic Characteristics Of Bodies In Free Molecular Flow, by L. A. Vasil'yev, L. I. Tavnikova. RUSSIAN, per, Patent No 168030, pp 1.
*FTD-TT-65-1935

The Application of Nuclear Magnetic Resonance to Catalyst Studies, by Hsu, Kuang-Chih. CHINESE, per, Hua Hsueh Shih Chieh, Vol XVIII, No 6, 1964, pp 243-245.
*FTD-TT-65-1873

Release of Atomic Energy, 46 pp. CHINESE, bk, Yuan-tzu-neng ti Yuan-li Ho Ying-yung, Jul 1965, pp 93-132
JPRS 33099

Nuclear Weapons and Defenses Against Them, 26 pp. CHINESE, bk, Yuan-tzu-neng ti Yuan-li Ho Ying-yung, Jul 1965, pp 267-293
JPRS 33099

Theory and Application of Atomic Energy, 9 pp. CHINESE, monograph, Yuan-tzu-neng ti Yuan-li ho Ying-yung, Jul 1965, pp. 1-12.
JPRS 32900

Nuclear Reactor Safety; The Meltdown of Metals at High Temperatures and Metal-Water Reactions, by Robert C. Liimatainen. FINNISH, per, Arkhimedes, J. Finnish Physical Soc, No 1, 1964, pp 27-36. 9230457
AEC-ORNL-Tr-694

Contribution to the Study of Neutron Propagation in Cavities, by Gilbert Hasselin. FRENCH, rpt, Mar 1965. CEA-R 2774 9231650-V
AEC-ORNL-Tr-751

Scientific
Nuclear Sciences & Technology (Contd)

Estimation of the Hydrogen Isotopes and of Their Allotropic Forms in the Gaseous State, by R. Viallard. FRENCH, per, Comptes Rendus, Vol CCXVII, 1943, pp 349-351. 9230411
AEC-NP-Tr-1266

Improvements in the Technology of the Sap for Nuclear Applications, Properties of the Investigated Materials, by P. Gualandi, P. Jehenson. 9230568
FRENCH, rpt, Oct 15-19 1962.
AEC-ORNL-Tr-797

Filter Strip Transport Device for Systems For the Measurement of the Radioactivity of Aerosols, GERMAN, Patent No 1,147,326. 9230444
AEC-ORNL-Tr-713

Radioactivity and Pleochroic Halos, by O. Mugge. GERMAN, per, Centralblatt f Mineralogie 1909, pp 65-71. 9230463
AEC-ORNL-Tr-757

Electrochemical Converters of Nuclear Energy, by G. Gruneberg, 55 pp. GERMAN, rpt, Keruforschungsanlage Julich, January 1964, 9230313.
AEC NP-tr-1295

Artificial Sources of Nuclear Energy in Cosmic Space, by O. S. Wolczek. GERMAN, bk, Kunstliche Kernenenergiequellen im Kosmischen Raum, 1959, pp 1-19.
*FTD-TT-65-1868

Remarks to the Discourses of J. Joly "On the Radioactivity of Rocks", by H. Hirschi. GERMAN, per, Die Naturwissenschaften, No 45, Nov 7, 1924, pp 939-940. 9230477
AEC-ORNL-Tr-708

Radioactive Halos in Quartz, Yttrofluorite and Cassiterite and New Findings on Atomic Stopping Power of the Elements, by Paul Ramdohr. GERMAN, per, Neues Jahrbuch f. Mineralogie Suppl, Vol LXVIII, 1933, pp 53-65. 9230461
AEC-ORNL-Tr-701

Scientific
Nuclear Sciences & Technology (Contd)

An Easy Method for the Accurate Determination of the Heavy Hydrogen Isotopes by Thermal Conductivity, by H. Sachsse, K. Bratzler.
GERMAN, per, Zeit fur Physik Chem, Vol CLXXI, 1934, pp 331-340. 9230475
AEC-NP-Tr-1275

The Plasma Rocket --- The Most Promising Event in Rocket Technology, by Nagy Lorincz.
HUNGARIAN, per, Repules, No 5, 1965, pp 14-15.
*FTD-TT-65-1886

Measurement of Gamma Backscattering on Concrete Walls, by Kazuo Ito, JAPANESE, per, Genshiryoku Kogyo, No 3, 1964, pp 22-25. 9230458
AEC-ORNL-Tr-710

Experimental Investigation of the Void Fraction in a Bed of the Randomly Packed Spheres, by B. Ruzhanski.
POLISH, rpt, Institute of Nuclear Research, Warsaw, Oct 1964. 9230433
AEC-BNL-Tr-22

Physics

A Method For Measuring The Temperature Of A Stream Of Exhaust Gases, by I. L. Frolovskiy.
RUSSIAN, per, Patent No 169826.
*FTD-TT-65-1944

Actinometry, by K. Ya. Kondrat'yev, 675 pp.
RUSSIAN, bk, Aktinometriya, Leningrad, 691 pp. 9230388-V
NASA TT F-9712

On the Motion of Particles in Symmetric Fields, by R. Klima.
RUSSIAN, rpt, Czechoslovak Journal of Physics, Vol BXV, 1965, pp 473-493.
*Dept of Navy/APL No J-684

Scientific
Physics (Contd)

Development and Investigation of a Photon Counter and Measurement of the Optical Excitation Functions of Helium Thesis, by Christiaan Smit.
DUTCH, rpt, 1961. 9231689-V
AEC-UCRL-Tr-1266-L

Effect of the State of Aggregation of Organic Dyes on their Photoconducting and Photo-paramagnetic (ESR) Properties, by A. M. Meshkov, V. Ye. Kholmogorov.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLX, No 2, 1965, pp 394-397.
*FTD-TT-65-1797

Relationship between Zonal and Discrete Absorption in X-Ray Spectra of Atoms in Polar Crystals, by L. N. Mazalov, E. Ye. Vaynshteyn, and V. G. Zyryanov, 7 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol 164, No 3, 1965, pp. 545-548.
JPRS 33148

Granulometric Study of Plutonium Oxide Particles in Suspension in the Atmosphere of a Foundry Chamber during U-Pu Alloy Fabrication, by G. Bataller, S. Lenkauer.
RUSSIAN, rpt, 1964. CEA-R-2558. 9230591
AEC-BNWL-Tr-7

Elastic Half-space with a Spherical Cavity, by G. G. Chankvetadze, 10 pp.
RUSSIAN, per, Inst Mekh Ak Nauk SSSR, Inzhen Sbornik, Vol XXII, 1955, pp 65-73.
Dept of Navy Tr 4361/NRL No 4361

Statistical Properties of Nonlinear String, by F. M. Izrallev, B. V. Chirikov.
RUSSIAN, rpt, Institute of Nuclear Physics of the Siberian Branch of the Acad of Science, Novosibirsk, 1965. 9230467
AEC-ORNL-Tr-754

High Energy Mu-Meson Beam Formation, by N. A. Burgov, A. G. Beda.
RUSSIAN, rpt, Institute for Theoretical and Experimental Physics, Moscow, Jan 29, 1964. 9240434
AEC-BNL-Tr-25

Scientific
Physics (Contd)

Calculation of the Optical Properties of a Stack of Plane-parallel Layers, by A. P. Khapalyuk.
RUSSIAN, per, Inzhen Fiz Zhur, Vol III, No 3, 1960, pp 59-68.
Dept of Navy Tr 4343/APL No T-1493

Calculation Of a Submerged Jet Of A Real Gas, by V. I. Badulev, 11 pp.
RUSSIAN, per, Inzhenernyy Zhurnal, Vol 1, No 3, pp. 65-74, 1961.
*FTD-TT-65-1923

Calculations of the Flow over Blunt-Nosed Bodies of Revolution with Surface Discontinuity, by S. N. Grineva.
RUSSIAN, per, Inzhen Zhur, Vol IV, No 3, 1964, pp 439-445.
*FTD-TT-65-1925

Stability of a Cylindrical Shell under Action of Variable Pressure, by S. N. Kukudzhinov.
RUSSIAN, per, Inzhen Zhur, Vol IV, No 3, 1964, pp 533-538.
*FTD-TT-65-1925

The Effect of a Nonisothermal Surface on Heat Exchange of a Plate in a Longitudinal Flow, by A. A. Zhukauskas.
RUSSIAN, per, Inzhen Fiz Zhur, Vol VII, No 4, 1964, pp 3-7.
*FTD-TT-65-1975

Some Experimental Data on the Effect of Pressure upon Oscillatory Spreading of a Flame in a Tube, by V. V. Kurzhuov.
RUSSIAN, per, Inzhen Fiz Zhur, No 7, 1964, pp 91-95.
*FTD-TT-65-1976

Calculation of Jet Trajectory in a Drifting Flow, by S. V. Vakhlov.
RUSSIAN, per, Inzhen Fiz Zhur, Vol VII, No 10, 1964, pp 112-116.
*FTD-TT-65-1977

Temperature Stresses in a Plate and Choice of Optimal Heating Rate, by A. A. Shevelev.
RUSSIAN, per, Inzhen Fiz Zhur, Vol VIII, No 1, 1965, pp 79-81.
*FTD-TT-65-1978

Scientific
Physics (Contd)

Distortion of a Jet in a Deflecting Flow, by Ya. M. Vize1, I. L. Mostinskiy.
RUSSIAN, per, Inzhen Fiz Zhur, Vol VIII, No 2, 1965, pp 238-242.
Dept of Navy Tr 4349/APL No T-1512

Matrix Function and its Application to Problems of Heat Transfer and Mass Transfer, by P. V. Tsoy.
RUSSIAN, per, Inzhen Fiz Zhur, Vol VIII, No 3, 1965, pp 380-385.
*FTD-TT-65-1979

Theory of Extremal Motion of a Point of Variable Mass in a Central Gravitation Field, by Yu. A. Gorelov.
RUSSIAN, per, Inzhen Zhur, Vol V, No 3, 1965, pp 536-540.
*Dept of Navy/PAL No J-705

Calculation of an Axisymmetric Supersonic Jet Issuing into a Concurrent Supersonic Stream or into a Stationary Medium, by V. M. Elmel'yanov.
RUSSIAN, per, Inzhen Zhur, Vol V, No 3, 1965, pp 545-548.
*Dept of Navy/APL No J-704

Selection of the Interpolation formula which Increases the time Interval between Two Measurements of a Stationary Random Process, by V. M. Efimov.
RUSSIAN, per, Izmeritel Tekh, No 5, 1965, pp 3-5.
*Dept of Navy/APL No J-700

Nonlinear Acoustic Vibration of a Cylindrical Shell, by A. S. Vol'mir, I. G. Kil'dibekov.
RUSSIAN, per, Iz AN ARMSSR, Ser Fiz-Mate Nauk, Vol XVII, No 3, 1964, pp 65-70.
*FTD-TT-65-1948

On the Problem of Orthotropic Plate Oscillations Placed in a High-Temperature Field, by S. A. Ambartsumyan.
RUSSIAN, per, Iz An SSSR Mekhanika i Mashinostroyeniye, No 4, 1963, pp 133-137.
*FTD-TT-65-1931

Scientific
Physics (Contd)

Thickness of the Turbulent Mixing Zone on the Streams of Gases of Different Velocities and Densities, by O. V. Yakovlevskiy.
RUSSIAN, per, Iz Ak Nauk SSSR, OTN, Tekh Kibernet, 1958, pp 153-155.
*FTD-TT-65-1928

Determining the Optimum Heating Rate for Certain Bodies, by A. A. Shevelev.
RUSSIAN, per, Iz Vyssh Ucheb Zaved, Energet, No 11, 1961, pp 77-83.
*FTD-TT-65-1810

Methods of Experimental Determination of the Distribution of Linear Energy Transfer and the Quality Factor of Penetrating Energy, by V. N. Lebedev.
RUSSIAN, rpt, Joint Institute for Nuclear Research, Dubna, Report No P-2069
9230438
AEC-NP-Tr-1267

Preparation of Polymers by Interfacial Condensation, by N. V. Mikhailov, V. I. Mniboroda.
RUSSIAN, per, Khimicheskiye Volokna, No 2, 1963, pp 19-22.
*FTD-TT-65-1889

M. I. Kalinina Leningrad Polytechnic Institute, by V. S. Smirnov, 21 pp.
RUSSIAN, per, Leningrad Politekh Inst im. M. I. Kalinina, 1962, 21 pp.
9698435
FTD-TT-65-411

Energy of the Normal State of He, by Yu. N. Demkov, et al.
RUSSIAN, per, Optika i Spektroskop, Vol IV, No 6, 1958, pp 709-714.
*AEC
EDC-30 Jan 1966

Synchronous Self-Excited Oscillator, by Yu. L. Zorokhovich, A. V. Potapov.
RUSSIAN, per, Patent No 169559.
*FTD-TT-65-1943

Structure of a Multifront-Line Detonation Wave in a Gas, by R. I. Soloukhin, 12 pp.
RUSSIAN, per, Nauchno-Tekhnicheskiye Problemy Goreniya i Vzryva, No 2, 1965, pp. 35-42.
JPRS 33116

Scientific
Physics (Contd)

The Effects of Explosion on Matter Thermodynamics of Shock Compression of Powders, by S. S. Batsanov, A. A. Deribas and S. A. Kutolin, 12 pp.
RUSSIAN, per, Nauchno-Tekhnicheskiye Problemy Goreniya i Vzryva, No 2, 1965, pp. 52-61.
JPRS 33116

Non-Stationary Combustion of Powder under the Action of a Pressure Impulse, by Yu. A. Gosmintsev and A. D. Margolin, 8 pp.
RUSSIAN, per, Nauchno-Tekhnicheskiye Problemy Goreniya i Vzryva, No 2, 1965, pp. 69-75.
JPRS 33116

Analogy of Detonation of Gaseous and Liquid Explosives by A. N. Dremine and O.K. Rozanov, 10 pp.
RUSSIAN, per, Nauchno-Tekhnicheskiye Problemy Goreniya i Vzryva, No 2, 1965, pp. 93-100.
JPRS 33116

Energy Losses during Explosions in a Spherical Bomb, by V. S. Babkin and L. S. Kozachenko, 6 pp.
RUSSIAN, per, Nauchno-Tekhnicheskiye Problemy Goreniya i Vzryva, No 2, 1965, pp. 114-117.
JPRS 33116

Plasma and Electronic Microwaves Oscillators and Amplifiers, by Z. S. Chernov.
RUSSIAN, bk, Plazmenn'e i Elektronnye Usiliteli i Deneratori svu,
*CB

Flows of Gas With Ignition Behind a Shock Wave, by R. I. Soloukhin, 15 pp.
RUSSIAN, per, Problemy Energetiki, 1959, pp 735-744. 9698518
FTD-MT-64-523

Flow-Through Elements of Pneumatic Monitoring and Control Devices, by L. A. Zalmanzon, 370 pp.
RUSSIAN, bk, Protochnyye Elementy Pnevmaticheskikh Priborov Kontrolya i Upravleniya, Moscow, 1961, 248 pp.
9698784-V
FTD-TT-65-168

Scientific
Physics (Contd)

Range Distribution of the Isobaric Sequences and the Range of the Fragments Caused by Thermal Fission of Pu-239, by Martin Hollstein.
RUSSIAN, rpt, Feb 1965. 9231667
AEC-UCRL-Tr-1253-L

X-Ray Determination of the Coefficient of Thermal Expansion, by A. M. Belikov.
RUSSIAN, per, Sbornik Nauch-Tekh. Trudov, Nauch-Issledovatel Inst Met Cheliabinsk Sovmarkhoza, No 1, 1960, pp 139-144. 9230469
AEC-LA-TR-65-20

Many-Particle Aspects of the Theory of Turbulent Plasma, by A. A. Galeev, V. I. Karpman.
RUSSIAN, bk, AN SSSR Sibirskoye Otdeleniye Institut Yadernoy Fiziki, 1964, pp 1-66.
*FTD-TT-65-1891

Investigation of Hyperfine Structure in the Pu-239 Spectrum, by L. A. Korostyleva,
RUSSIAN, per, Soveshchanie po Spektroskopii, Vol 1, 1962, pp 69-72. 9230442
AEC-NP-Tr-1305

Angular Correlation Between γ -Mesons and Leptons and the Determination of Form Factors in $K\mu 3$ -Decay, by I. S. Tsukerman.
RUSSIAN, rpt, State Committee on the Use of Atomic Energy, USSR, Institute of Theoretical and Experimental Physics, Moscow, 1964. 9230431
AEC-Tr-6608

Determination of the Kinematics of the Reaction $\pi^- + p \rightarrow \pi^- + p + \pi^+ + \pi^-$; The Study of the $\pi^- + p \rightarrow \pi^+ + p + \pi^-$ Reaction at an Energy of 2.8 BeV, by V. K. Grigor'ev, A. P. Grishin.
RUSSIAN, rpt, State Committee on the Use of Atomic Energy USSR Institute of Theoretical and Experimental Physics, 1964. 9230430
AEC-Tr-6591

Taking Account of Disjunctive Constraints in Critical-Path Methods, by B. Sussmann, 36 pp.
RUSSIAN, rpt, Symposium on Critical Path Analysis, Study Group of the Operational Research Society, London, 6 May 1965, 9230314.
AEC NP-tr-1285

Scientific
Physics (Contd)

The Elastic Equilibrium of an Anisotropic Half-Plane, Weakened by an Elliptical Aperture, by A. S. Kosmodamianskiy.
RUSSIAN, per, Trudy Gruz Politekhn In-T, 1963, No 8, pp 179-183.
*FTD-TT-65-1961

Some Variational Methods of Solving Problems in the Theory of Elasticity by A. I. Kutikov.
RUSSIAN, per, Trudy Kazan Aviatsionnyy Institut, No 77, 1963, pp 24-34.
*FTD-MT-65-580

Effect of the Stiffness Requirements on the Minimum Volume of a System With Prescribed Stresses, by V. P. Borisov.
RUSSIAN, per, Trudy Kazan Aviatsionnyy Institut, No 77, 1963, pp 61-70.
*FTD-MT-65-580

Selfsections of Cross Sections of Systems With Equal Resistance to Bend by S. Kh. Gaynullina,
RUSSIAN, per, Trudy Kazan Aviatsionnyy Institut, No 77, 1963, pp 83-88.
*FTD-MT-65-580

Some Autonomous Problems of the Theory of Nonlinear Vibrations, by V. O. Kononenko.
RUSSIAN, per, Trudy Mezhdunar Simpoziuma po Nelineyn. Kolebaniyam, 1961, Ak Nauk SSSR, 1963, pp 151-178.
*FTD-TT-65-1954

Flow Method of Irradiation With Ionizing Rays, by A. V. Zimin, F. Y. Frolov.
RUSSIAN, per, Tr. Nauchn Issled, Fiz Khim Inst, 1963, pp 130-133. 9230473
AEC-Tr-6567

On a Boundary Problem Connected With the Calculation of a Prismatic Shell of Varying Thickness, by D. Kasimov.
RUSSIAN, per, Uchenyye Zapiski, No 7, 1956, pp 3-21.
*FTD-TT-65-1800

Reflection of Electromagnetic Waves From the Open End of a Waveguide, by S. S. Kalmykova, 7 pp.
UKRAINIAN, per, Ukrayins'kyy Fiz Zhur, Vol IX, No 6, 1964, pp 593-598. 9698634
FTD-TT-65-646

Scientific
Physics (Contd)

Measurement of the Average Energy Losses of Electrons in Scattering of the Electron Beam in Plasma, by L. L. Pasichnyk.
UKRAINIAN, per, Ukrayins'kyi Fizychnyy Zhurnal, Vol 9, No 9, 1964, pp 1027-1030.
*FTD-TI-65-1920

Discussion of the Report on the Activities of the Department of General and Applied Physics for the Year 1963/64, by L. A. Artsimovich.
RUSSIAN, per, Vest Ak Nauk SSSR, No 2, 1965, pp 15-50. 9230595
AEC-NP-Tr-1292 Draft

The Method of Transverse Approximation in a Hypersonic Flow, by I. I. Aleksenko, R. G. Barantsev.
RUSSIAN, per, Vest Leningrad Univ, Ser Mate, Mekh i Astron, No 4, 1962, pp 62-78.
*FTD-TI-65-1806

High Frequency Region of the Noise-Formation Spectrum of a Jet Stream, by V. A. Krasil'nikov, R. E. Shikhinskaya.
RUSSIAN, per, Vestnik Universitet Seriya III. Fizika Astronomiya, No 3, 1964, pp 72-81.
*FTD-TI-65-568

Generation of the Second Harmonic of Light in a Thin Crystal Layer, by Yu. A. Gol'din.
RUSSIAN, per, Vest Moskov Univ, Ser III, Fiz Astron, No 3, 1965, pp 84-88.
*Dept of Navy/APL No J-699

Cyclolinear Polyphenylsiloxane, by S. A. Pavlova, V. I. Pakhomov, 6 pp.
RUSSIAN, per, Vysch Soyed, Vol VI, No 7, 1964, pp 1275-1280. 9698617
FTD-TT-65-871

Nature of Destruction of Spherulitic Structure and Its Effect on Mechanical Properties of Isotactic Polypropylene in a Wide Range of Temperatures, by V. A. Kargin, T. I. Sogolova, 9 pp.
RUSSIAN, per, Vysokomolekulyarnyye Soyed, Vol VI, No 8, 1964, pp 1407-1410; 1539. 9698652
FTD-TT-65-776

Scientific
Physics (Contd)

Kinetics of Irreversible Processes of Reverse Magnetization of Ferrites With Rectangular Hysteresis Loop, by N. N. Sirota, 7 pp.
RUSSIAN, rpt, Vsesoyuznoye Soveshchaniye po Ferritam i po Beskontaktnym Magnitnym Elementam Avtomatiki, 3D Minsk. Ferrity i Beskontaktnyye Elementy, 1963, pp 5-10. 9698225
FTD-TT-65-622

Application of Normal Ultrasonic Vibrations to Inspection of Thin-Walled Curvilinear Shells, by B. I. Vybornov.
RUSSIAN, per, Zavodskaya Laboratoriya, Vol 31, No 3, 1965, pp 322-325.
*FTD-TT-65-1951

A Method for Strain Testing Small Specimens at a Temperature up to 1600 C in a Vacuum, by Yu. Ye. Andrianov, et al.
RUSSIAN, per, Zavodskaya Laboratoriya, Vol 31, No 3, 1965, pp 367-369.
*FTD-TT-65-1951

Polarization During Ion Redox Processes Rechargings, Ions of Iron, Thallium, Cerium, And Vanadium, by L. Antropov, E. Mizgireva.
RUSSIAN, per, Zhur Fiz Khim, Vol XV, 1941, pp 776-792. 9230478
AEC-Tr-6572

Study of the Atomic-Molecular Structure of Certain Oxides by the Method of Radial Distribution, by N. A. Shishakov.
RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 1, pp 36, 37, 41, 1957. 9230450
AEC-SC-T-65-744

Approximate Determination of Gas Parameters Behind a Shockwave Front from the Law of Motion of the Front, by V. V. Adushkin, I. V. Nemchinov.
RUSSIAN, per, Zhur Priklad Mekh i Tekh Fiz, No 4, 1963, pp 58-67.
Dept of Navy Tr 4346/APL No T-1482

Remark on Escape of Gas Cloud into Vacuum, by Yu. P. Rayzer, 7 pp.
RUSSIAN, per, Zhur Priklad Mekh i Tekh Fiz, No 30, 1964, pp 162, 163.
Dept of Navy Tr 4331/CNI 2007

Scientific
Physics (Contd)

The Neutralization of Spherically
Divergent Fluxes of Charged Particles,
by V. A. Levin.

RUSSIAN, per, Zhur Prik Mekh i Tekh
Fiz, No 3, 1965, pp 68-70.
*FTD-TT-65-1812

The Effect of Flow Boundaries Upon
Cavity Flow Around a Cylinder, by
K. K. Shal'nev.

RUSSIAN, per, Zhur Prik Mekh i Tekh
Fiz, No 3, 1965, pp 103-108.
*FTI TT-65-1813

The Production of X-Ray Photographs With Very
Short Exposure Times, by V. A. Tsukerman, A. I.
Avdeyenko, 14 pp.

RUSSIAN, per, Zhurnal Tekh Fiz, Vol XII, 1942,
pp 185-196, 9230425.
AEC LA-tr-65-21

On the Kinetic Theory of the Boundary
Layer between a Rarefied Plasma and a
Magnetic Field, by Yu. S. Sigov, 17 pp.

RUSSIAN, per, Zhur Vychis Matemat i Matemat
Fiziki, Vol IV, No 6, 1964, pp 1065-1077.
9698516
FTD-MT-65-152

Experimental Determination of Inertia
Parameters of Moving Body under Water,
by Chao Kuo-hua (6392 0943 5478) and Chiang
Yun (3068 0061), 47 pp.

CHINESE, per, Chung-kuo Tsao-ch'uan, No 2,
(58) Apr 1965, pp. 1-26.
JPRS 33046

Optical Maser of Nd^{3+} in $CaWO_4$, by Liu Chun-
fu (0491 7311 4395) Ch'en Hsi (7115 0363),
Liang Pao-ken (2733 1405 2704) Huang Yung-k'ai
(7806 3057 2818), Li Shih-ying (2621 1102
5391) and Wu chin-k'ang (0702 6855 1660), 6 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 9, 20
Sept 1965, pp. 827-829.
JPRS 33152

The First National Meeting of Engineering
Thermal Physics, by Wu Chung-hua, 8 pp.

CHINESE, per, K'o-hsueh T'ung-pao, No 10
Oct 1965, pp 933-935
JPRS 32985

Scientific
Physics (Contd)

Approximate Calculation of the Theory of
Plasticity for thin Shell,

by Chou, Ch'eng-T'ia.

CHINESE, per, Li Hsueh Hsueh Pao,
Vol VII, No 1, pp 1-11, 1964.
*FTD TT-65-1828

A New Method for Measuring Thermal and
Thermoelectric Characteristics of
Substances Particularly Semiconductors,
of Undefined Shape, by J. Krempasky.
CZECH, per, Chekhoslovatskiy Fizicheskiy
Zhurnal, Vol 14, No 7, pp 533-554.
*FTD-TT-65-1840

Kinetics of the Reaction of Water Vapor
on Uranium Monocarbide at High

Temperature, by C. Moreau, J. Philippot.
FRENCH, per, Comptes Rendus, Vol CCLIX,
9 Dec 1964, pp 4285-4288. 9230410
AEC-LA-65-19

A Process for Conversion of Ionizing
Energy From a Nuclear Reactor into
Electricity, by Siegfried Klein.

FRENCH, rpt, Proc 6th Int Conf on Ionization
Phenomena in Gases, Vol IV, 1963, pp 537-541.
9230435
AEC-BNL-Tr-28

Recent Improvements in Rapid Photomultipliers
for use in Nuclear Physics, by G. Pietri,
J. NUSSLI, et al, 18 pp.

FRENCH, rpt, Report of the International
Colloquium Organized by Societe Francaise des
Electroniciens et des Radioelectriciens
(SFER), Paris, 25-27 Nov 1964, pp 793-805.
Dept of Navy Tr 4353/ONI 2009

On the preferred Occurrence of the Hexagonal
Cell Structure in the Fluid Convection
Currents over a Uniformly Heated Surface,
by Jurgen Zierp.

GERMAN, per, Beitrage zur Physik der Atmo-
sphere, Vol XXXI, 1958, pp 31-39.
Dept of Navy Tr 4360/NRL No 1037

Theory of Propagation of X-Rays Wavefield Rays
in the Weakly Deformed Crystal Lattice,
by U. Bonse.

GERMAN, per, Z fuer Physik, Vol CLVII, 1964,
pp 385-423. 9230564
AEC-ORNL-Tr-791

Scientific
Physics (Contd)

Strong Deflection of X-Ray Wavefield Rays in
Elastically Deformed Crystals, by U. Bonse,
18 pp.
GERMAN, per, Zeitschrift fur Phys., Vol CLXXVII,
1964, pp 529-542, 9230421.
AEC ORNL-tr-792

Contrast at Dislocations in the X-Ray Photo-
graph, by U. Bonse.
GERMAN, per, Z fuer Physik, Vol CLVII, 1964,
pp 543-561. 9230565
AEC-ORNL-Tr-793

A Contribution to the Theory of
Tarnishing Process, by C. Wagner.
GERMAN, per, Zeit fur Physik Chemie,
No 32, 1936, pp 447-462.
*FTD-TT-65-1913

A Contribution to the Theory of
Tarnishing Process, by C. Wagner,
K. Grunewald.
GERMAN, per, Zeit fur Physik Chemie,
No 40, 1938, pp 455-475.
*FTD-TT-65-1914

The Thermodynamic Analysis of Liquidus
Curves of Intermetallic Compounds,
by Karl Hauffe and Carl Wagner.
GERMAN, per, Ztschr Elektrochem, Vol XLVI
No 3, 1940, pp 160-170. 9230449
AEC-ORNL-Tr-836

The Catalytic Isotopic Exchange of
Gaseous Oxygen VII. The Exchange
Mechanism of Oxygen Stoms between
Oxygen Gas and Water Vapor on the Surface
of Calcium Oxide. (1), by
Noriyoshi Morita.
JAPANESE, per, The Bulletin of the
Chemical Society of Japan, Vol XV,
1940, pp 119-129. 9230409
AEC-LA-Tr-65-18

Unsteady Motion of a Wing of Finite Span
in a Compressible Medium, by
E. A. Krasil'shchikova.
POLISH, per, Archiwum Mechaniki Stosowanej,
Vol 16, No 2, 1964, pp 285-290.
*FTD-TT-65-1827

Scientific
Physics (Contd)

Determining the Power Required by
Plasma of a High Frequency Ion Source,
by A. Lipinsky, H. Malecki, 10 pp.
POLISH, per, Nukleonika, Vol IX, No 9,
1964, pp 705-713. 9698615
FTD-TT-65-893

The Photovoltaic Method of Measuring
the Specific Resistance of Epitaxial
Films, by K. Piotrowski, J. Swiderski.
POLISH, per, Przeglad Elektroniki,
No 1, 1965, pp 39-41.
*FTD-TT-65-1957

Experimental Investigation of Hyper-
sonic Flows, Part 2, by R. Rowinski.
POLISH, per, Technika Lotnicza, No 1,
1965, pp 9-15.
*FTD-TT-65-1729

Miscellaneous

What Does the Odor of the Drill Tell? by Ye.
Muslin, 7 pp.
RUSSIAN, per, Izobretatel' i Rationalizator,
No 7, Jul 1965, pp. 11-13.
JPRS 33117

Losses to Science, by Yu. V. Filippov.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Geograf,
No 3, 1965.
*ACSI I-7843-D
ID 2204037265

Structural Characteristics of Several
Types of Complex Subordinate Clauses
(In Connection With the Problem of
Homonymic Connecting Words, by L. I.
Kaplan.
RUSSIAN, per, Nauchno-Tekhnicheskaya
Informatsiya, No 3, 1964, pp 36-43.
*FTD-TT-65-1893

Scientific
Miscellaneous (Contd)

Supervision over Studies on Resistance of
Materials without Using Machines, by L. T.
Pesochina, G. A. Mirze and M. K. Moloch-
nikova, 5 pp.
RUSSIAN, per, Vestnik Vysshey Shkoly, No 3,
Mar 1965, pp. 19-21.
JPRS 32942

Introduction to Cybernetics, by
H. Sobotta, 14 pp.
GERMAN, per, Messen - Steuern - Regeln,
No 11, 1964, pp 121-124. 9698616
FTD-TT-65-1227

INFORMATION RECEIVED DURING DECEMBER

ON COVER - TO - COVER TRANSLATIONS

Acta Biochimica Polonica, Vol XII, No 3, 1965.
Office of Technical Services TT 65-50309/3

Geokhimiya, No 5, 1964.
Geochemical Society

Acta Physiologica Polonica, Vol XV, No 4, 1964.
Office of Technical Services TT 64-11407/4

Geologiya Merti i Gaza, Vol XI, No 1, 1962.
The Geological Society of America

Acta Physiologica Polonica, Vol XV,
No 5, 1964.
Office of Technical Services TT 64-11407/5

Glasnik Hemijskog Društva - Beograd, Vol XXIX,
No 1-2, 1964.
Office of Technical Services TT 64-11460/1-2

Acta Poloniae Pharmaceutica, Vol XXI, No 5,
1964.
Office of Technical Services TT 64-11412/5

Izvestiya Akademii Nauk SSSR, OTN, Tekh-
nicheskaya Kibernetika, No 4, 1965.
JPRS

Archivum Immunologiae Et Therapiae Experimentalis,
Vol XIII, No 3, 1965.
Office of Technical Services TT 65-50305/3

Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya,
No 6, June 1965.
American Geophysical Union

Ching-chi Yen-chiu (Economic Research), No 10,
October 1965.
Joint Publications Research Service 33403

Izvestiya Vysshikh Uchebnykh Zavedeniy,
Priborostroyeniye, Vol VIII, No 4, 1965,

JPRS 33032

Elektrokhimiya, Vol I, No 2, Feb, 1965.
CB

JETP Pis'ma v Redaktsiyu, Vol II, No 3, 1 Aug 1965
American Institute of Physics
JETP Letters

Elektrosvyaz', Vol XIX, No 6, 1965.
IKKE

JETP Pis'ma v Redaktsiyu, Vol II, No 4, 15 Aug
1965.
American Institute of Physics
JETP Letters

Fizika Tverdogo Tela, Vol VII, No 6, 1965.
Amer Inst of Phys
Sov Phys - Sol State
Vol VII, No 6, Dec 1965

JETP Pis'ma v Redaktsiyu, Vol II, No 5, 1 Sept 1965.
American Institute of Physics
JETP Letters

Fiziologiya Rastenii, Vol XI, No 6, Nov,
Dec 1964.
CB

JETP Pis'ma v Redaktsiyu, Vol II, No 6, 15 Sept
1965.
American Institute of Physics
JETP Letters

Genetika, No 1, 1965.
JPRS 33170

Kibernetika, No 4, July-August 1965.
JPRS 33371

Optika i Spektroskopiya, Vol XVIII, No 6,
1965.
Opt Soc of Amer

Optika i Spektroskopiya, Vol XIX, No 1, July 1965.
Optical Society of America

Optika i Spektroskopiya, Vol XIX, No 2, Aug
1965.
Optical Society of America

Polski Tygodnik Lekarski, Vol XIX, No 28-29,
1964.

Office of Technical Services TT 65-50306/3
Vol IV, No 3, 1965

Problemy Kibernetiki, No 14, 1965.
JPRS 32605

Radiobiologiya, Vol V, No 1, 1965.
Atomic Energy Commission Tr-6598

Radiobiologiya, Vol V, No 3, 1965.
AEC Tr-6600

Radiotekhnika i Elektronika, No 6, June 1965.
The Institute of Electrical and Electronic
Engineers

Radiotekhnika, Vol XX, No 6, 1965.
IEEE

Radiotekhnika, Vol XX, No 7, 1965. July
Institute of Electrical and Electronics Engineers

Teoriya Veroyatnostei i ee Primeneniya, Vol IX,
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JPRS 33011

Vestnik Akademii Meditsinskikh Nauk SSSR,
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JPRS

Vestnik Akademii Meditsinskikh SSSR, Vol XX,
No 11, 1965.

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*JPRS

Vestnik svyazi, Vol XXIV, No 9, 1965.
JPRS 33017

Zhurnal Obshchei Khimii, Vol XXXIV, No 12, Dec 1964.
CB

Zhurnal Organicheskoi Khimii, Vol I, No 2,
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CB

Zhurnal Prikladnoi Khimii, Vol XXXVII, No 12, 1964.

CB

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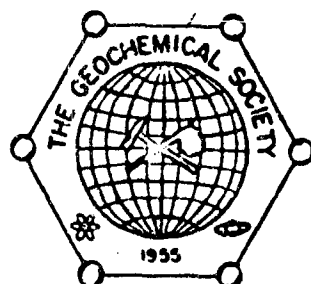
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RUSSIAN ABBREVIATIONS IN TEXT

AN SSSR.....	Academy of Sciences, USSR.
CC CPSU.....	Central Committee, Communist Party Soviet Union.
Gintsvetmet.....	State Institute of Non-Ferrous Metals.
Giprotsvetmet.....	State Institute for the Design and Planning of Non-Ferrous Metals Industry Establishments.
Giredmet.....	State Rare Metals Scientific Research Institute.
Gosplan.....	State Planning Committee of the Council of Ministers, USSR.
GOST.....	All-Union Standard.
KazSSR.....	Kazakh SSR.
Mashgis.....	State Scientific and Technical Publishing House of Literature on Machinery.
Mekhanobr.....	Scientific Research Institute for the Mechanical Concentration of Minerals.
Metallurgizdat.....	State Scientific and Technical Publishing House of Literature on Ferrous and Non-Ferrous Metallurgy.
NTO.....	Scientific and Technical Society.
OTK.....	Technical Control Division (of plant).
Sovmarkhoz.....	Council of the National Economy.
TsIIN TsM.....	Central Office for Information on Non-Ferrous Metals.
UkSSR.....	Ukrainian SSR.
VAMI.....	All-Union Aluminum and Magnesium Institute.

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Vestnik OF THE USSR ACADEMY OF MEDICAL SCIENCES

Vol XX, No 8, 1965

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Vestnik OF THE USSR ACADEMY OF MEDICAL SCIENCES

Vol XX, No 9, 1965

[Following is a complete translation of the Russian-language journal Vestnik Akademii Meditsinskikh Nauk SSSR (Herald of the USSR Academy of Medical Sciences), Moscow, Vol XX, No 9, 1965, pp 1-111]

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HERALD OF COMMUNICATIONS

No 9, 1965

Following is a translation of selected articles from the Russian-language periodical Vestnik svyazi (Herald of Communications), Vol XXV No 9, published by the Ministry of Communications USSR and the Central Committee of the Communications, Motor Transport and Highway Workers Trade Union, September, 1965, Moscow. Note: Original source pages are given in the left-hand margin. Summaries within brackets are those of the translator.

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Central Intelligence Agency



Washington, D.C. 20505

7 September 2004

Ms. Roberta Schoen
Deputy Director for Operations
Defense Technical Information Center
7725 John J. Kingman Road
Suite 0944
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

A handwritten signature in cursive script, reading "Sergio N. Alcivar".

Sergio N. Alcivar
Chief, CIA Declassification Center,
Declassification Review and Referral
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)

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Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed
by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0463342	78-03109A	55	1	2	88	Consolidated Translation Survey For April 1965	4/1/1965	190	Approved For Release	3/25/2004
AD0465168	78-03109A	55	1	3	89	Consolidated Translation Survey For May 1965	5/1/1965	245	Approved For Release	3/25/2004
AD0467068	78-03109A	55	1	4	90	Consolidated Translation Survey For June 1965	6/1/1965	221	Approved For Release	3/25/2004
AD0468849	78-03109A	55	1	5	91	Consolidated Translation Survey For July 1965	7/1/1965	218	Approved For Release	3/25/2004
AD0471155	78-03109A	55	1	6	92	Consolidated Translation Survey For August 1965	8/1/1965	236	Approved For Release	3/25/2004
AD0473500	78-03109A	55	1	7	93	Consolidated Translation Survey For September 1965	9/1/1965	221	Approved For Release	3/25/2004
AD0474384	78-03109A	55	1	8	94	Consolidated Translation Survey For October 1965	10/1/1965	181	Approved For Release	3/25/2004
AD0475860	78-03109A	55	1	9	95	Consolidated Translation Survey For November 1965	11/1/1965	305	Approved For Release	3/25/2004
AD0477388	78-03109A	56	1	1	96	Consolidated Translation Survey For December 1965	12/1/1965	181	Approved For Release	3/25/2004
AD0478471	78-03109A	56	1	2	97	Consolidated Translation Survey For January 1966	1/1/1966	198	Approved For Release	3/25/2004
AD0479675	78-03109A	56	1	3	98	Consolidated Translation Survey For February 1966	2/1/1966	354	Approved For Release	3/25/2004
AD0481681	78-03109A	56	1	4	99	Consolidated Translation Survey For March 1966	3/1/1966	237	Approved For Release	3/25/2004
AD0334379	78-03117A	191	1	37	4255	Status And Activities Of Prominent Scientists In Communist China In 1962	1/29/1963	53	Approved For Release	3/29/2004
AD0333974	78-03117A	190	1	35	4212	Scientific Information Report Outer Mongolia (1)	1/17/1963	27	Approved For Release	3/29/2004
AD0335202	78-03117A	195	1	13	4394	Scientific Information Report Outer Mongolia (2)	3/13/1963	27	Approved For Release	3/25/2004
AD0332657	78-03117A	183	1	13	3924	Scientific Information Report Biology And Medicine (22)	10/12/1962	76	Approved For Release	3/29/2004
AD0333147	78-03117A	185	1	30	4020	Scientific Information Report Biology And Medicine (23)	11/16/1962	90	Approved For Release	3/29/2004
AD0333427	78-03117A	188	1	13	4112	Scientific Information Report Biology And Medicine (24)	12/13/1962	84	Approved For Release	3/29/2004
AD0334160	78-03117A	190	1	10	4187	Scientific Information Report Biology And Medicine (25)	1/10/1963	69	Approved For Release	3/29/2004
AD0334612	78-03117A	193	1	10	4310	Scientific Information Report Biology And Medicine (26)	2/20/1963	112	Approved For Release	3/29/2004
AD0335309	78-03117A	195	1	32	4413	Scientific Information Report Biology And Medicine (27)	3/20/1963	110	Approved For Release	3/29/2004
AD0336242	78-03117A	198	1	16	4509	Scientific Information Report Biology And Medicine (28)	4/12/1963	81	Approved For Release	3/29/2004
AD0332575	78-03117A	184	1	6	3957	Scientific Information Report Chemistry And Metallurgy (22)	10/23/1962	47	Approved For Release	3/29/2004
AD0333164	78-03117A	187	1	2	4061	Scientific Information Report Chemistry And Metallurgy (23)	11/28/1962	65	Approved For Release	3/25/2004
AD0333857	78-03117A	189	1	22	4160	Scientific Information Report Chemistry And Metallurgy (24)	1/2/1963	57	Approved For Release	3/29/2004
AD0334310	78-03117A	191	1	20	4238	Scientific Information Report Chemistry And Metallurgy (25)	1/28/1963	52	Approved For Release	3/29/2004